2014644

NOTES:

1. INTERPRET DRAWING IN ACCORDANCE WITH STANDARDS PRESCRIBED BY MIL-D-70327.
2. VENDOR ITEM - SEE SPECIFICATION CONTROL DRAWING.
3. SELECT AS REQUIRED.
4. DRAWING FOR REFERENCE ONLY.

REVISIONS

SYM	ZONE	DESCRIPTION	CHG NO.	DATE	APPD.
C		INITIAL CLASS A RELEASE TDRR NO. 22050			

	ITEM NO.	NO. REQD	PART OR IDENTIFYING NUMBER	NOMENCLATURE OR DESCRIPTION
		4		CLAMP, PSA CONNECTOR, 5052-H32-AL-PER QQ-A-250/8, 3"LG X 1/2"WD X 1/16" THK
		2		COVER, PSA CONNECTOR, 5052-H32-AL-PER QQ-A-250/8, 11"LG X 3"WD X 1/32 THK
		1		CONNECTOR, PSA (P17) 6061-T6 AL PER QQ-A-250/11, 9"LG X 2"WD X 1/2" THK
SEE NOTE 4		X	2014674	INTERCONNECT LIST
		1		CLAMP, CONNECTOR
		1		
		2		CLAMP, CONNECTOR
		AR	1010989	TAPE, SHIELDING, EMI/RFI
		1	2014644-018	WIRE PER 1010789-019, 50 FT TOTAL LG
		1	-017	-018, 50
		1	-016	-017, 50
		1	-015	-016, 50
		1	2014644-014	WIRE PER 1010789-015, 100 FT TOTAL LG
		2		ADAPTER, POTTING MOLD
		1	1010930-009	CONNECTOR, RECEPTACLE (J1)
SEE NOTE 2 & 3		AR	1012507-4	TAPE, LACING
			1012507-2	TAPE, LACING
SEE NOTE 2		1	1010400-7	CLAMP, CABLE
SEE NOTE 2		AR	1010661	EPOXY RESIN
SEE NOTE 2		AR	1010679	ADHESIVE ACTIVATOR
SEE NOTE 2		AR	1012503	COMPOUND, POTTING, POLYURETHANE
		AR	MIL-T-23594	TAPE, TEFLON
		1		ADAPTER, POTTING MOLD
SEE NOTE 2		75	1010490-112	INSULATION, SLEEVING, ELECT.
SEE NOTE 2		75	1010490-110	INSULATION, SLEEVING, ELECT.

LIST OF PARTS AND MATERIALS

	ITEM NO.	NO. REQD	PART OR IDENTIFYING NUMBER	NOMENCLATURE OR DESCRIPTION
		8	MS21209-C0415	INSEP, SCREW THREAD, SELF-LOCKING
		2	6008007	SCREW, CAPTIVE
SEE NOTE 2		65	1010402-2	SLEEVE, SOLDER
SEE NOTE 2		65	1010402-1	SLEEVE, SOLDER
		1		ADAPTER, POTTING MOLD
SEE NOTE 3		1	1010981-30 THRU 1010981-1	GROMMET
		70	1010958-1	PLUG, PROTECTIVE SEALING
		1	2014644-013	WIRE PER 1010701-1, 50 FT TOTAL LG
		1	2014644-011	WIRE PER 1010789-012, 500 FT TOTAL LG
		1	2014644-010	WIRE PER 1010789-011, 100 FT TOTAL LG
		1	2014644-008	WIRE PER 1010789-009, 50 FT TOTAL LG
		1	-007	-008, 100
		1	2014644-006	WIRE PER 1010789-006, 200 FT TOTAL LG
		1	2014644-004	WIRE PER 1010789-004, 100 FT TOTAL LG
		1	-003	-003, 400
		1	-002	-002, 200
		1	2014644-001	WIRE PER 1010789-001, 700 FT TOTAL LG
		168	1010956-1	INSULATOR; MALE
		28	1010955-1	CONTACT, MALE
SEE NOTE 2		61	1010770-1	CONTACT, PIN
SEE NOTE 2		214	1010770-2	CONTACT, SOCKET
		1	1010930-105	CONNECTOR, RECEPTACLE (J5)
		1	1010930-002	CONNECTOR, RECEPTACLE (J3)
		1	1010930-001	CONNECTOR, RECEPTACLE (J4)

LIST OF PARTS AND MATERIALS

NEXT ASSY	USED ON
2014567-011	2014567-011

APPLICATION

UNLESS OTHERWISE SPECIFIED
DIMENSIONS ARE IN INCHES
TOLERANCES ON
FRACTIONS ± ___ DECIMALS ± ___ ANGLES ± ___

DO NOT SCALE THIS DRAWING

MATERIAL ___

CONTRACT NAS 9-497

MIT INSTRUMENTATION LAB
CAMBRIDGE, MASS.
DWG. NO CONTRACT

DRAWN E. LITZOW 27 MAY 65 DATE
CHECKED EESLER 28 MAY 65
APPROVAL RC Watson 8-24-65
APPROVAL 8-23-65
DEP. 8-16-65
NASA APPROVAL
MIT APPROVAL 31 Aug 65

MANNED SPACECRAFT CENTER
HOUSTON, TEXAS

G&N INTERCONNECT HARNESS "D"

CODE IDENT NO.	SIZE	
80230	C	2014644

SCALE ___ SHEET 1 OF 1

MIL 1077C-P

APPLICATION		REVISIONS			
NEXT ASSY	USED ON	SYM	DESCRIPTION	DATE	APPROVAL
2014567-011	2014567-011	E	REPLACES REV D WITH CHANGE PER TDRR		
		F	ADDED CONFIGURATION & CHANGES PER TDR 24809	14 Jul 65	WJL

REPLACES REV D WITH CHANGE

| REV | E | E | E

NOTE NUMBER	GENERAL NOTES DESCRIPTION
29	ASSEMBLE A LENGTH OF WIRE BRAID, ITEM 42, OVER CONDUCTOR D130. ALLOW 1.75 INCH OF LEAD TO EXTEND BEYOND BRAID. COVER BRAID WITH TEFLON TAPE, ITEM 26, PER NOTE 26. ALLOW .25 INCH OF BRAID TO EXTEND BEYOND TAPE, FOLD BRAID OVER TAPE AND TERMINATION PER ND1002071 FIGURE 6B.

LEAD TOLERANCE CHART

	LEAD LG	JKT STRIP LG	SHIELD STRIP LG	LEAD CUT LG	INS STRIP LG
UNDER 3 INCHES	+ .12-.00	+.06-.06	+.06-.06	+.06-.06	+.06-.00
3 INCH TO 3 FT	+ .50-.00	+.25-.25	+.25-.25	+.25-.25	
3 FT TO 10 FT	+1.00-.00				
10 FT AND OVER	+2.00-.00				

SIZE	CODE IDENT NO.	
A	80230	2014644
SCALE-NONE	REV LTR F	SHEET 5 OF 38

SEE NOTE LIST OF MATERIALS

NUMBER	ITEM	QTY	PART NO.	DESCRIPTION
	1	1	2014644- 1	WIRE PER 1010789-006, 22AWG, YEL, 5 FT TOT LG
	2	1	2014644- 2	WIRE PER 1010789-016, 26AWG, YEL, 65 FT TOT LG
	3	1	2014644- 3	WIRE PER 1010789-011, 24AWG, YEL YEL JKT, 5 FT TOT LG
	4	1	2014644- 4	WIRE PER 1010789-008, 22 AWG, YEL, RED, 5 FT TOT LG
	5	1	2014644- 5	WIRE PER 1010789-017, 26 AWG, YEL, RED, 50 FT TOT LG
	6	1	2014644- 6	WIRE PER 1010789-015, 26 AWG, YEL, RED, YEL JKT, 60 FT TOT LG
	7	1	2014644- 7	WIRE PER 1010789-018, 26 AWG, YEL, RED, GRN, 5 FT TOT LG
	8	1	2014644- 8	WIRE PER 1010789-013, 24 AWG, YEL, RED, GRN, YEL JKT, 5 FT TOT LG
	9	1	2014644- 9	WIRE PER 1010789-002, 24 AWG, BLK, 78 FT TOT LG
	10	1	2014644- 10	WIRE PER 1010789-024, 26AWG, BLK, 50 FT TOT LG
9	11	1	1010930-009	CONNECTOR, RECEPTACLE, ELECTRICAL (56J1)
9	12	1	1010930-105	CONNECTOR, RECEPTACLE, ELECTRICAL (56J2)
9	13	1	1010930-002	CONNECTOR, RECEPTACLE, ELECTRICAL (56J3)
9	14	1	1010930-001	CONNECTOR, RECEPTACLE, ELECTRICAL (56J4)
9	15	~~REF~~ X	1010770- 1	CONTACT, PIN, SUPPLIED WITH CONNECTOR 1010930

SIZE	CODE IDENT NO.	
A	80230	2014644
SCALE-NONE	REV LTR F	SHEET 6 OF 38

SEE NOTE LIST OF MATERIALS

NUMBER	ITEM	QTY	PART NO.	DESCRIPTION
9	16	~~REF~~ X	1010770- 2	CONTACT, SOCKET, SUPPLIED WITH CONNECTOR 1010930
9	17	168	1010955-001	CONTACT, MALE
9	18	136	1010955-002	CONTACT, MALE
9	19	52	1010958-001	PLUG, PROTECTIVE SEALING
9	20	82	1010402- 2	SLEEVE, SOLDER
	21	1	2014670- 4	ADAPTER, CONNECTOR
	22	1	2014670- 12	ADAPTER, CONNECTOR
	23	1	2014670- 7	ADAPTER, CONNECTOR
	24	AR	1012507-004	TAPE, LACING
	25	AR	MIL-T-23594	TAPE, TEFLON, TYPE II, 1 INCH WIDE
	26	AR	MIL-T-23594	TAPE, TEFLON, TYPE II, 1/4 INCH WIDE
	28	AR	1012503	COMPOUND, POTTING, POLYURETHANE
	29	AR	1010679	ADHESIVE ACTIVATOR
	30	AR	1010661	EPOXY RESIN
	31	AR	1006277	SILICA, PULVERIZED, PYROGENIC
	32	AR	1008822	COLORANT, EPOXY BASE
	33	AR	1012504	PRIMER, METAL PARTS
	34	AR	1010989	TAPE, SHIELDING, EMI/RFI, 16 FT TOT LG

SIZE	CODE IDENT NO.	
A	80230	2014644
SCALE-NONE	REV LTR F	SHEET 7 OF 38

SEE NOTE LIST OF MATERIALS

NUMBER	ITEM	QTY	PART NO.	DESCRIPTION
	35	AR	1006776- 44	INSULATION SLEEVING
	36	1	2014644- 11	WIRE PER QQ-W-343, TYPE C, CLASS C, 22 AWG, 30 FT TOT LG
	37	1	2014744-011	CONNECTOR, PLUG, ELECTRICAL (56P17)
	38	1	MS17182-2	TERMINAL LUG
	39	1	MS17182-1	TERMINAL LUG
	40	2	MS35333-69	WASHER, LOCK
	41	2	1006783- 93	SCREW, BUTTON HD
	42	1	2014644- 12	WIRE BRAID,QQ-B-575,1/8 DIA.,36AWG,2 FT TOT LG
	43	1	2014670- 11	ADAPTER, CONNECTOR

SIZE	CODE IDENT NO.	
A	80230	2014644
SCALE-NONE	REV LTR F	SHEET 8 OF 38

LEAD IDENT	WIRE MATL ITEM	LEAD LG	CIRCUIT PT FROM (A) TO (B)	TERM. AREA NO.	JKT STRIP LG	SHLD STRIP LG	LEAD CUT LG	INS STRIP LG	TIN	NOTE ONE, FIG	ACCESSORY ITEMS	REMARKS
D	1	6			1.75	1.50				6B	20	
					1.00	.75				6B	20	
D	1A	9	SHLD D1					.20	NO			
			J4-30					.13	NO		16	
D	1B	9	P17-G31					.18	NO		17	BRANCH 2
			SHLD D1					.20	NO			
D	1R		J4-52					.13	NO		16	
			P17-H31					.18	NO		18	BRANCH 2
D	1Y		J4-51					.13	NO		16	
			P17-K31					.18	NO		18	BRANCH 2
D	2	6			1.75	1.50				6B	20	
					1.00	.75				6B	20	
D	2A	9	SHLD D2					.20	NO			
			J4-31					.13	NO		16	
D	2B	9	P17-G32					.18	NO		17	BRANCH 2
			SHLD D2					.20	NO			
D	2R		J4-54					.13	NO		16	
			P17-K32					.18	NO		18	BRANCH 2
D	2Y		J4-53					.13	NO		16	
			P17-H32					.18	NO		18	BRANCH 2
D	3	6			1.75	1.50				6B	20	
					1.00	.75				6B	20	
D	3A	9	SHLD D3					.20	NO			
			J4-29					.13	NO		16	

SIZE	CODE IDENT NO.	
A	80230	2014644
SCALE-NONE	REV LTR E	SHEET 9 OF 38

MIL 2084 9-65

LEAD IDENT	WIRE MATL ITEM	LEAD LG	CIRCUIT PT FROM (A) TO (B)	TERM. AREA NO.	JKT STRIP LG	SHLD STRIP LG	LEAD CUT LG	INS STRIP LG	TIN	NOTE ONE, FIG	ACCESSORY ITEMS	REMARKS
D	3B	10	P17-G33					.22	NO			BRANCH 2
			SHLD D3					.20	NO			
D	3R		J4-13					.13	NO		16	
			P17-H33					.22	NO			BRANCH 2
D	3Y		J4-14					.13	NO		16	
			P17-K33					.22	NO			BRANCH 2
D	4	6			1.75	1.50				6B	20	
					1.00	.75				6B	20	
D	4A	9	SHLD D4					.20	NO			
			J4-32					.13	NO		16	
D	4B	10	P17-G34					.22	NO			BRANCH 2
			SHLD D4					.20	NO			
D	4R		J4-16					.13	NO		16	
			P17-K34					.22	NO			BRANCH 2
D	4Y		J4-15					.13	NO		16	
			P17-H34					.22	NO			BRANCH 2
D	5	6			1.75	1.50				6B	20	
					1.00	.75				6B	20	
D	5A	9	SHLD D5					.20	NO			
			J4-36					.13	NO		16	
D	5B	9	P17-G29					.18	NO		17	BRANCH 2
			SHLD D5					.20	NO			
D	5R		J4-59					.13	NO		16	
			P17-H29					.18	NO		18	BRANCH 2

SIZE	CODE IDENT NO.	
A	80230	2014644
SCALE-NONE	REV LTR E	SHEET 10 OF 38

MIL 2084 9-65

LEAD IDENT	WIRE MATL ITEM	LEAD LG	CIRCUIT PT FROM (A) TO (B)	TERM. AREA NO.	JKT STRIP LG	SHLD STRIP LG	LEAD CUT LG	INS STRIP LG	TIN	NOTE ONE, FIG	ACCESSORY ITEMS	REMARKS
D	5Y		J4-60					.13	NO		16	
			P17-K29					.18	NO		18	BRANCH 2
D	6	6			1.75	1.50				6B	20	
					1.00	.75				6B	20	
D	6A	9	SHLD D6					.20	NO			
			J4-37					.13	NO		16	
D	6B	9	P17-G30					.18	NO		17	BRANCH 2
			SHLD D6					.20	NO			
D	6R		J4-61					.13	NO		16	
			P17-K30					.18	NO		18	BRANCH 2
D	6Y		J4-38					.13	NO		16	
			P17-H30					.18	NO		18	BRANCH 2
D	7	6			1.75	1.50				6B	20	
					1.00	.75				6B	20	
D	7A	9	SHLD D7					.20	NO			
			J4-33					.13	NO		16	
D	7B	10	P17-F27					.22	NO			BRANCH 2
			SHLD D7					.20	NO			
D	7R		J4-56					.13	NO		16	
			P17-F28					.22	NO			BRANCH 2
D	7Y		J4-55					.13	NO		16	
			P17-F29					.22	NO			BRANCH 2
D	8	6			1.75	1.50				6B	20	
					1.00	.75				6B	20	

SIZE	CODE IDENT NO.	
A	80230	2014644
SCALE-NONE	REV LTR E	SHEET 11 OF 38

MIL 2084 9-65

LEAD IDENT	WIRE MATL ITEM	LEAD LG	CIRCUIT PT FROM (A) TO (B)	TERM. AREA NO.	JKT STRIP LG	SHLD STRIP LG	LEAD CUT LG	INS STRIP LG	TIN	NOTE ONE, FIG	ACCESSORY ITEMS	REMARKS
D	10R		J4-49					.13	NO		16	
			P17-K28					.18	NO		18	BRANCH 2
D	10Y		J4-50					.13	NO		16	
			P17-H28					.18	NO		18	BRANCH 2
D	11	6			1.75	1.50				6B	20	
					1.00	.75				6B	20	
D	11A	9	SHLD D11					.20	NO			
			J4-35					.13	NO		16	
D	11B	10	P17-G25					.22	NO			BRANCH 1
			SHLD D11					.20	NO			
D	11R		J4-17					.13	NO		16	
			P17-H25					.22	NO			BRANCH 1
D	11Y		J4-18					.13	NO		16	
			P17-K25					.22	NO			BRANCH 1
D	12	6			1.75	1.50				6B	20	
					1.00	.75				6B	20	
D	12A	9	SHLD D12					.20	NO			
			J4-20					.13	NO		16	
D	12B	10	P17-G26					.22	NO			BRANCH 1
			SHLD D12					.20	NO			
D	12R		J4-19					.13	NO		16	
			P17-K26					.22	NO			BRANCH 1
D	12Y		J4-8					.13	NO		16	
			P17-H26					.22	NO			BRANCH 1

SIZE	CODE IDENT NO.	
A	80230	2014644
SCALE-NONE	REV LTR E	SHEET 13 OF 38

MIL 2084 9-65

LEAD IDENT	WIRE MATL ITEM	LEAD LG	CIRCUIT PT FROM (A) TO (B)	TERM. AREA NO.	JKT STRIP LG	SHLD STRIP LG	LEAD CUT LG	INS STRIP LG	TIN	NOTE ONE, FIG	ACCESSORY ITEMS	REMARKS
D 13	6				1.75	1.50				6B	20	
					1.00	.75				6B	20	
D 13A	9		SHLD D13					.20	NO			
			J4-22					.13	NO		16	
D 13B	9		P17-C25					.18	NO		17	BRANCH 1
			SHLD D13					.20	NO			
D 13R			J4-41					.13	NO		16	
			P17-A25					.18	NO		18	BRANCH 1
D 13Y			J4-42					.13	NO		16	
			P17-B25					.18	NO		18	BRANCH 1
D 14	6				1.75	1.50				6B	20	
					1.00	.75				6B	20	
D 14A	9		SHLD D14					.20	NO			
			J4-24					.13	NO		16	
D 14B	9		P17-C39					.18	NO		17	BRANCH 2
			SHLD D14					.20	NO			
D 14R			J4-43					.13	NO		16	
			P17-B39					.18	NO		18	BRANCH 2
D 14Y			J4-44					.13	NO		16	
			P17-A39					.18	NO		18	BRANCH 2
D 15	6				1.75	1.50				6B	20	
					1.00	.75				6B	20	
D 15A	9		SHLD D15					.20	NO			
			J4-25					.13	NO		16	

SIZE	CODE IDENT NO.	
A	80230	2014644
SCALE-NONE	REV LTR E	SHEET 14 OF 38

MIL 2084 9-65

LEAD IDENT	WIRE MATL ITEM	LEAD LG	CIRCUIT PT FROM (A) TO (B)	TERM. AREA NO.	JKT STRIP LG	SHLD STRIP LG	LEAD CUT LG	INS STRIP LG	TIN	NOTE ONE, FIG	ACCESSORY ITEMS	REMARKS
D 8A	9		SHLD D8					.20	NO			
			J4-34					.13	NO		16	
D 8B	10		P17-F33					.22	NO			BRANCH 2
			SHLD D8					.20	NO			
D 8R			J4-57					.13	NO		16	
			P17-F31					.22	NO			BRANCH 2
D 8Y			J4-58					.13	NO		16	
			P17-F32					.22	NO			BRANCH 2
D 9	6				1.75	1.50				6B	20	
					1.00	.75				6B	20	
D 9A	9		SHLD D9					.20	NO			
			J4-27					.13	NO		16	
D 9B	9		P17-G27					.18	NO		17	BRANCH 2
			SHLD D9					.20	NO			
D 9R			J4-48					.13	NO		16	
			P17-H27					.18	NO		18	BRANCH 2
D 9Y			J4-47					.13	NO		16	
			P17-K27					.18	NO		18	BRANCH 2
D 10	6				1.75	1.50				6B	20	
					1.00	.75				6B	20	
D 10A	9		SHLD D10					.20	NO			
			J4-28					.13	NO		16	
D 10B	9		P17-G28					.18	NO		17	BRANCH 2
			SHLD D10					.20	NO			

SIZE	CODE IDENT NO.	
A	80230	2014644
SCALE-NONE	REV LTR E	SHEET 12 OF 38

MIL 2084 9-65

LEAD IDENT	WIRE MATL ITEM	LEAD LG	CIRCUIT PT FROM (A) TO (B)	TERM. AREA NO.	JKT STRIP LG	SHLD STRIP LG	LEAD CUT LG	INS STRIP LG	TIN	NOTE ONE, FIG	ACCESSORY ITEMS	REMARKS
D 15B	9		P17-D40					.18	NO		17	BRANCH 2
			SHLD D15					.20	NO			
D 15R			J4-45					.13	NO		16	
			P17-D41					.18	NO		18	BRANCH 2
D 15Y			J4-46					.13	NO		16	
			P17-C41					.18	NO		18	BRANCH 2
D 16	6				1.75	1.50				6B	20	
					1.00	.75				6B	20	
D 16A	9		SHLD D16					.20	NO			
			J4-21					.13	NO		16	
D 16B	9		P17-C24					.18	NO		17	BRANCH 1
			SHLD D16					.20	NO			
D 16R			J4-39					.13	NO		16	
			P17-B24					.18	NO		18	BRANCH 1
D 16Y			J4-40					.13	NO		16	
			P17-D24					.18	NO		18	BRANCH 1
D 17	6				1.75	1.50				6B	20	
					1.00	.75				6B	20	
D 17A	9		SHLD D17					.20	NO			
			J4-10					.13	NO		16	
D 17B	9		P17-C38					.18	NO		17	BRANCH 2
			SHLD D17					.20	NO			
D 17R			J4-9					.13	NO		16	
			P17-A38					.18	NO		18	BRANCH 2

SIZE	CODE IDENT NO.	
A	80230	2014644
SCALE-NONE	REV LTR E	SHEET 15 OF 38

MIL 2084 9-65

LEAD IDENT	WIRE MATL ITEM	LEAD LG	CIRCUIT PT FROM (A) TO (B)	TERM. AREA NO.	JKT STRIP LG	SHLD STRIP LG	LEAD CUT LG	INS STRIP LG	TIN	NOTE ONE, FIG	ACCESSORY ITEMS	REMARKS
D 17Y			J4-23					.13	NO		16	
			P17-B38					.18	NO		18	BRANCH 2
D 18	6				1.75	1.50				6B	20	
					1.00	.75				6B	20	
D 18A	9		SHLD D18					.20	NO			
			J4-11					.13	NO		16	
D 18B	9		P17-C40					.18	NO		17	BRANCH 2
			SHLD D18					.20	NO			
D 18R			J4-26					.13	NO		16	
			P17-B41					.18	NO		18	BRANCH 2
D 18Y			J4-12					.13	NO		16	
			P17-B40					.18	NO		18	BRANCH 2
D 19	6				1.75	1.50				6B	20	
					1.00	.75				6B	20	
D 19A	9		SHLD D19					.20	NO			
			J4-1					.13	NO		16	
D 19B	9		P17-C26					.18	NO		17	BRANCH 1
			SHLD D19					.20	NO			
D 19R			J4-6					.13	NO		16	
			P17-B26					.18	NO		18	BRANCH 1
D 19Y			J4-7					.13	NO		16	
			P17-A26					.18	NO		18	BRANCH 1
D 20	1		J4-5					.13	NO		16	
			P17-D25					.18	NO		17	BRANCH 1

SIZE	CODE IDENT NO.	
A	80230	2014644
SCALE-NONE	REV LTR E	SHEET 16 OF 38

MIL 2084 9-65

LEAD IDENT	WIRE MATL ITEM	LEAD LG	CIRCUIT PT FROM (A) TO (B)	TERM.AREA NO.	JKT STRIP LG	SHLD STRIP LG	LEAD CUT LG	INS STRIP LG	TIN	NOTE ONE, FIG	ACCESSORY ITEMS	REMARKS
D 21	1		J4-4					.13	NO		16	
			P17-F25					.18	NO		17	BRANCH 1
D 22	6				1.75	1.50				6B	20	
					1.00	.75				6B	20	
D 22A	9		SHLD D22					.20	NO			
			J1-17					.13	NO		16	
D 22B	9		P17-F3					.18	NO		17	BRANCH 1
			SHLD D22					.20	NO			
D 22R			J1-34					.13	NO		16	
			P17-F1					.18	NO		18	BRANCH 1
D 22Y			J1-33					.13	NO		16	
			P17-F2					.18	NO		18	BRANCH 1
D 23	6				1.75	1.50				6B	20	
					1.00	.75				6B	20	
D 23A	9		SHLD D23					.20	NO			
			J1-18					.13	NO		16	
D 23B	9		P17-K3					.18	NO		17	BRANCH 1
			SHLD D23					.20	NO			
D 23R			J1-35					.13	NO		16	
			P17-H4					.18	NO		18	BRANCH 1
D 23Y			J1-36					.13	NO		16	
			P17-K4					.18	NO		18	BRANCH 1
D 24	6				1.75	1.50				6B	20	
					1.00	.75				6B	20	

SIZE	CODE IDENT NO.	
A	80230	2014644
SCALE-NONE	REV LTR E	SHEET 17 OF 38

MIL 2084 9-65

LEAD IDENT	WIRE MATL ITEM	LEAD LG	CIRCUIT PT FROM (A) TO (B)	TERM.AREA NO.	JKT STRIP LG	SHLD STRIP LG	LEAD CUT LG	INS STRIP LG	TIN	NOTE ONE, FIG	ACCESSORY ITEMS	REMARKS
D 24A	9		SHLD D24					.20	NO			
			J1-14					.13	NO		16	
D 24B	9		P17-G3					.18	NO		17	BRANCH 1
			SHLD D24					.20	NO			
D 24R			J1-30					.13	NO		16	
			P17-G2					.18	NO		18	BRANCH 1
D 24Y			J1-29					.13	NO		16	
			P17-G1					.18	NO		18	BRANCH 1
D 25	6				1.75	1.50				6B	20	
					1.00	.75				6B	20	
D 25A	9		SHLD D25					.20	NO			
			J1-15					.13	NO		16	
D 25B	9		P17-H3					.18	NO		17	BRANCH 1
			SHLD D25					.20	NO			
D 25R			J1-31					.13	NO		16	
			P17-H1					.18	NO		18	BRANCH 1
D 25Y			J1-32					.13	NO		16	
			P17-H2					.18	NO		18	BRANCH 1
D 26	6				1.75	1.50				6B	20	
					1.00	.75				6B	20	
D 26A	9		SHLD D26					.20	NO			
			J1-20					.13	NO		16	
D 26B	9		P17-G6					.18	NO		17	BRANCH 1
			SHLD D26					.20	NO			

SIZE	CODE IDENT NO.	
A	80230	2014644
SCALE-NONE	REV LTR E	SHEET 18 OF 38

MIL 2084 9-65

LEAD IDENT	WIRE MATL ITEM	LEAD LG	CIRCUIT PT FROM (A) TO (B)	TERM.AREA NO.	JKT STRIP LG	SHLD STRIP LG	LEAD CUT LG	INS STRIP LG	TIN	NOTE ONE, FIG	ACCESSORY ITEMS	REMARKS
D 26R			J1-19					.13	NO		16	
			P17-H6					.18	NO		18	BRANCH 1
D 26Y			J1-37					.13	NO		16	
			P17-K6					.18	NO		18	BRANCH 1
D 27	6				1.75	1.50				6B	20	
					1.00	.75				6B	20	
D 27A	9		SHLD D27					.20	NO			
			J1-21					.13	NO		16	
D 27B	9		P17-G5					.18	NO		17	BRANCH 1
			SHLD D27					.20	NO			
D 27R			J1-38					.13	NO		16	
			P17-K5					.18	NO		18	BRANCH 1
D 27Y			J1-39					.13	NO		16	
			P17-H5					.18	NO		18	BRANCH 1
D 28	6				1.75	1.50				6B	20	
					1.00	.75				6B	20	
D 28A	9		SHLD D28					.20	NO			
			J1-13					.13	NO		16	
C 28B	10		P17-C4					.22	NO			BRANCH 1
			SHLD D28					.20	NO			
C 28R			J1-28					.13	NO		16	
			P17-A4					.22	NO			BRANCH 1
D 28Y			J1-27					.13	NO		16	
			P17-B4					.22	NO			BRANCH 1

SIZE	CODE IDENT NO.	
A	80230	2014644
SCALE-NONE	REV LTR E	SHEET 19 OF 38

MIL 2084 9-65

LEAD IDENT	WIRE MATL ITEM	LEAD LG	CIRCUIT PT FROM (A) TO (B)	TERM.AREA NO.	JKT STRIP LG	SHLD STRIP LG	LEAD CUT LG	INS STRIP LG	TIN	NOTE ONE, FIG	ACCESSORY ITEMS	REMARKS
D 29	6				1.75	1.50				6B	20	
					1.00	.75				6B	20	
D 29A	9		SHLD D29					.20	NO			
			J1-16					.13	NO		16	
D 29B	10		P17-C5					.22	NO			BRANCH 1
			SHLD D29					.20	NO			
D 29R			J1-6					.13	NO		16	
			P17-B5					.22	NO			BRANCH 1
D 29Y			J1-5					.13	NO		16	
			P17-A5					.22	NO			BRANCH 1
D 30	6				1.75	1.50				6B	20	
					1.00	.75				6B	20	
D 30A	9		SHLD D30					.20	NO			
			J1-1					.13	NO		16	
D 30B	10		P17-C6					.22	NO			BRANCH 1
			SHLD D30					.20	NO			
D 30R			J1-4					.13	NO		16	
			P17-A6					.22	NO			BRANCH 1
D 30Y			J1-3					.13	NO		16	
			P17-B6					.22	NO			BRANCH 1
D 31	7											
D 31G			J1-26					.13	NO		16	
			P17-D4					.18	NO		18	BRANCH 1

SIZE	CODE IDENT NO.	
A	80230	2014644
SCALE-NONE	REV LTR E	SHEET 20 OF 38

MIL 2084 9-65

WIRING HARNESS D 2014644 E

LEAD IDENT	WIRE MATL ITEM	LEAD LG	CIRCUIT PT FROM (A) TO (B)	TERM. AREA NO.	JKT STRIP LG	SHLD STRIP LG	LEAD CUT LG	INS STRIP LG	TIN	NOTE ONE, FIG	ACCESSORY ITEMS	REMARKS
D 31R			J1-43					.13	NO		16	
			P17-D6					.18	NO		18	BRANCH 1
D 31Y			J1-44					.13	NO		16	
			P17-D5					.18	NO		18	BRANCH 1
D 32	7											
D 32G			J1-8					.13	NO		16	
			P17-F4					.18	NO		18	BRANCH 1
D 32R			J1-7					.13	NO		16	
			P17-F5					.18	NO		18	BRANCH 1
D 32Y			J1-2					.13	NO		16	
			P17-F6					.18	NO		18	BRANCH 1
D 35	2		J1-25					.13	NO		16	
			P17-A3					.18	NO		18	BRANCH 1
D 36	4											
D 36R			J1-40					.13	NO		16	
			P17-K8					.18	NO		17	BRANCH 1
D 36Y			J1-23					.13	NO		16	
			P17-H8					.18	NO		17	BRANCH 1
D 37	4											
D 37R			J1-41					.13	NO		16	
			P17-K9					.18	NO		17	BRANCH 1

SIZE	CODE IDENT NO.	
A	80230	2014644
SCALE-NONE	REV LTR E	SHEET 21 OF 38

MIL 2084 9-65

WIRING HARNESS D 2014644 E

LEAD IDENT	WIRE MATL ITEM	LEAD LG	CIRCUIT PT FROM (A) TO (B)	TERM. AREA NO.	JKT STRIP LG	SHLD STRIP LG	LEAD CUT LG	INS STRIP LG	TIN	NOTE ONE, FIG	ACCESSORY ITEMS	REMARKS
C 37Y			J1-42					.13	NO		16	
			P17-K10					.18	NO		17	BRANCH 1
D 40	2		J3-8					.13	NO		16	B
			P17-C16					.18	NO		18	BRANCH 1
C 42	2		J3-7					.13	NO		16	B
			P17-B16					.18	NO		18	BRANCH 1
D 50	2		J3-2					.13	NO		16	B
			P17-C18					.18	NO		18	BRANCH 1
D 55	6				1.75	1.50				6B	20	
					1.00	.75				6B	20	
D 55A	9		SHLD D55					.20	NO			
			J3-30					.13	NO		16	
D 55B	10		P17-C4					.22	NO		17	BRANCH 1
			SHLD D55					.20	NO			
D 55R			J3-31					.13	NO		16	
			P17-A4					.22	NO		17	BRANCH 1
D 55Y			J3-15					.13	NO		16	
			P17-B4					.22	NO		17	BRANCH 1
D 56	6				1.75	1.50				6B	20	
					1.00	.75				6B	20	
C 56A	9		SHLD D56					.20	NO			
			J3-52					.13	NO		16	
D 56B	10		P17-C5					.22	NO		17	BRANCH 1
			SHLD D56					.20	NO			

SIZE	CODE IDENT NO.	
A	80230	2014644
SCALE-NONE	REV LTR E	SHEET 22 OF 38

MIL 2084 9-65

WIRING HARNESS D 2014644 E

LEAD IDENT	WIRE MATL ITEM	LEAD LG	CIRCUIT PT FROM (A) TO (B)	TERM. AREA NO.	JKT STRIP LG	SHLD STRIP LG	LEAD CUT LG	INS STRIP LG	TIN	NOTE ONE, FIG	ACCESSORY ITEMS	REMARKS
C 56R			J3-77					.13	NO		16	
			P17-B5					.22	NO		17	BRANCH 1
D 56Y			J3-53					.13	NO		16	
			P17-A5					.22	NO		17	BRANCH 1
D 57	6				1.75	1.50				6B	20	
					1.00	.75				6B	20	
D 57A	9		SHLD D57					.20	NO			
			J3-51					.13	NO		16	
D 57B	10		P17-C6					.22	NO		17	BRANCH 1
			SHLD D57					.20	NO			
D 57R			J3-75					.13	NO		16	
			P17-A6					.22	NO		17	BRANCH 1
D 57Y			J3-76					.13	NO		16	
			P17-B6					.22	NO		17	BRANCH 1
D 58	6				1.75	1.50				6B	20	
					1.00	.75				6B	20	
D 58A	9		SHLD D58					.20	NO			
			J3-46					.13	NO		16	
D 58B	10		P17-G33					.22	NO		17	BRANCH 2
			SHLD D58					.20	NO			
D 58R			J3-71					.13	NO		16	
			P17-H33					.22	NO		17	BRANCH 2
D 58Y			J3-70					.13	NO		16	
			P17-K33					.22	NO		17	BRANCH 2

SIZE	CODE IDENT NO.	
A	80230	2014644
SCALE-NONE	REV LTR E	SHEET 23 OF 38

MIL 2084 9-65

WIRING HARNESS D 2014644 E

LEAD IDENT	WIRE MATL ITEM	LEAD LG	CIRCUIT PT FROM (A) TO (B)	TERM. AREA NO.	JKT STRIP LG	SHLD STRIP LG	LEAD CUT LG	INS STRIP LG	TIN	NOTE ONE, FIG	ACCESSORY ITEMS	REMARKS
D 59	6				1.75	1.50				6B	20	
					1.00	.75				6B	20	
D 59A	9		SHLD D59					.20	NO			
			J3-69					.13	NO		16	
D 59B	10		P17-G34					.22	NO		17	BRANCH 2
			SHLD D59					.20	NO			
D 59R			J3-45					.13	NO		16	
			P17-K34					.22	NO		17	BRANCH 2
D 59Y			J3-44					.13	NO		16	
			P17-H34					.22	NO		17	BRANCH 2
D 60	6				1.75	1.50				6B	20	
					1.00	.75				6B	20	
D 60A	9		SHLD D60					.20	NO			
			J3-28					.13	NO		16	
D 60B	10		P17-F27					.22	NO		17	BRANCH 2
			SHLD D60					.20	NO			
D 60R			J3-13					.13	NO		16	
			P17-F28					.22	NO		17	BRANCH 2
C 60Y			J3-29					.13	NO		16	
			P17-F29					.22	NO		17	BRANCH 2
D 61	6				1.75	1.50				6B	20	
					1.00	.75				6B	20	
D 61A	9		SHLD D61					.20	NO			
			J3-74					.13	NO		16	

SIZE	CODE IDENT NO.	
A	80230	2014644
SCALE-NONE	REV LTR E	SHEET 24 OF 38

MIL 2084 9-65

LEAD IDENT	WIRE MATL ITEM	LEAD LG	CIRCUIT PT FROM (A) TO (B)	TERM. AREA NO.	JKT STRIP LG	SHLD STRIP LG	LEAD CUT LG	INS STRIP LG	TIN	NOTE ONE, FIG	ACCESSORY ITEMS	REMARKS
D 61B	10		P17-F33					.22	NO		17	BRANCH 2
			SHLD D61					.20	NO			
D 61R			J3-49					.13	NO		16	
			P17-F31					.22	NO		17	BRANCH 2
D 61Y			J3-50					.13	NO		16	
			P17-F32					.22	NO		17	BRANCH 2
D 62	6				1.75	1.50				6B	20	
					1.00	.75				6B	20	
D 62A	9		SHLD D62					.20	NO			
			J3-27					.13	NO		16	
D 62B	10		P17-G25					.22	NO		17	BRANCH 1
			SHLD D62					.20	NO			
D 62R			J3-26					.13	NO		16	
			P17-H25					.22	NO		17	BRANCH 1
D 62Y			J3-47					.13	NO		16	
			P17-K25					.22	NO		17	BRANCH 1
D 63	6				1.75	1.50				6B	20	
					1.00	.75				6B	20	
D 63A	9		SHLD D63					.20	NO			
			J3-48					.13	NO		16	
D 63B	10		P17-G26					.22	NO		17	BRANCH 1
			SHLD D63					.20	NO			
D 63R			J3-72					.13	NO		16	
			P17-K26					.22	NO		17	BRANCH 1

SIZE	CODE IDENT NO.	
A	80230	2014644
SCALE-NONE	REV LTR E	SHEET 25 OF 38

MIL 2084 9-65

LEAD IDENT	WIRE MATL ITEM	LEAD LG	CIRCUIT PT FROM (A) TO (B)	TERM. AREA NO.	JKT STRIP LG	SHLD STRIP LG	LEAD CUT LG	INS STRIP LG	TIN	NOTE ONE, FIG	ACCESSORY ITEMS	REMARKS
D 63Y			J3-73					.13	NO		16	
			P17-H26					.22	NO		17	BRANCH 1
D 64	4											
D 64R			J3-67					.13	NO		16	
			P17-H9					.18	NO		17	BRANCH 1
D 64Y			J3-68					.13	NO		16	
			P17-H10					.18	NO		17	BRANCH 1
D 65	8				1.75	1.50				6B	20	
					1.00	.75				6B	20	
D 65A	9		SHLD D65					.20	NO			
			J2-44					.13	NO		15	
D 65B	9		P17-C21					.18	NO		17	BRANCH 1
			SHLD D65					.20	NO			
D 65G			J2-25					.13	NO		15	
			P17-B21					.18	NO		17	BRANCH 1
D 65R			J2-46					.13	NO		15	
			P17-C20					.18	NO		17	BRANCH 1
D 65Y			J2-45					.13	NO		15	
			P17-B20					.18	NO		17	BRANCH 1
D 66	3				1.75	1.50				6B	20	
					1.00	.75				6B	20	
D 66A	9		SHLD D66					.20	NO			
			J2-26					.13	NO		15	

SIZE	CODE IDENT NO.	
A	80230	2014644
SCALE-NONE	REV LTR E	SHEET 26 OF 38

MIL 2084 9-65

LEAD IDENT	WIRE MATL ITEM	LEAD LG	CIRCUIT PT FROM (A) TO (B)	TERM. AREA NO.	JKT STRIP LG	SHLD STRIP LG	LEAD CUT LG	INS STRIP LG	TIN	NOTE ONE, FIG	ACCESSORY ITEMS	REMARKS
D 66B	9		P17-B19					.18	NO		17	BRANCH 1
			SHLD D66					.20	NO			
D 66Y			J2-47					.13	NO		15	
			P17-C19					.18	NO		17	
D 67	5											A
D 67R			J2-55					.13	NO		15	A
			P17-A31					.18	NO		18	BRANCH 2
D 67Y			J2-56					.13	NO		15	A
			P17-B31					.18	NO		18	BRANCH 2
D 68	5											A
D 68R			J2-54					.13	NO		15	A
			P17-A32					.18	NO		18	BRANCH 2
D 68Y			J2-32					.13	NO		15	A
			P17-B32					.18	NO		18	BRANCH 2
D 69	5											A
D 69R			J2-17					.13	NO		15	A
			P17-A33					.18	NO		18	BRANCH 2
D 69Y			J2-33					.13	NO		15	A
			P17-B33					.18	NO		18	BRANCH 2
D 70	5											A

SIZE	CODE IDENT NO.	
A	80230	2014644
SCALE-NONE	REV LTR E	SHEET 27 OF

MIL 2084 9-65

LEAD IDENT	WIRE MATL ITEM	LEAD LG	CIRCUIT PT FROM (A) TO (B)	TERM. AREA NO.	JKT STRIP LG	SHLD STRIP LG	LEAD CUT LG	INS STRIP LG	TIN	NOTE ONE, FIG	ACCESSORY ITEMS	REMARKS
D 70R			J2-16					.13	NO		15	A
			P17-A34					.18	NO		18	BRANCH 2
D 70Y			J2-5					.13	NO		15	A
			P17-B34					.18	NO		18	BRANCH 2
D 71	5											A
D 71R			J2-57					.13	NO		15	A
			P17-A35					.18	NO		18	BRANCH 2
D 71Y			J2-34					.13	NO		15	A
			P17-B35					.18	NO		18	BRANCH 2
D 72	5											A
D 72R			J2-18					.13	NO		15	A
			P17-A36					.18	NO		18	BRANCH 2
D 72Y			J2-35					.13	NO		15	A
			P17-B36					.18	NO		18	BRANCH 2
D 73	5											A
D 73R			J2-15					.13	NO		15	A
			P17-A28					.18	NO		18	BRANCH 2
D 73Y			J2-30					.13	NO		15	A
			P17-B28					.18	NO		18	BRANCH 2
D 74	5											A

SIZE	CODE IDENT NO.	
A	80230	2014644
SCALE-NONE	REV LTR E	SHEET 28 OF 38

MIL 2084 9-65

LEAD IDENT	WIRE MATL ITEM	LEAD LG	CIRCUIT PT FROM (A) TO (B)	TERM. AREA NO.	JKT STRIP LG	SHLD STRIP LG	LEAD CUT LG	INS STRIP LG	TIN	NOTE ONE, FIG	ACCESSORY ITEMS	REMARKS
D 74R			J2-52					.13	NO		15	A
			P17-A29					.18	NO		18	BRANCH 2
D 74Y			J2-53					.13	NO		15	A
			P17-B29					.18	NO		18	BRANCH 2
D 75		5										A
D 75R			J2-50					.13	NO		15	A
			P17-F37					.18	NO		18	BRANCH 2
D 75Y			J2-51					.13	NO		15	A
			P17-F36					.18	NO		18	BRANCH 2
D 76		5										A
D 76R			J2-13					.13	NO		15	A
			P17-K37					.18	NO		18	BRANCH 2
D 76Y			J2-29					.13	NO		15	A
			P17-H37					.18	NO		18	BRANCH 2
D 77		5										A
D 77R			J2-12					.13	NO		15	A
			P17-H36					.18	NO		18	BRANCH 2
D 77Y			J2-27					.13	NO		15	A
			P17-K36					.18	NO		18	BRANCH 2
D 78		5										A

SIZE	CODE IDENT NO.	
A	80230	2014644
SCALE-NONE	REV LTR E	SHEET 29 OF 38

MIL 2084 9-65

LEAD IDENT	WIRE MATL ITEM	LEAD LG	CIRCUIT PT FROM (A) TO (B)	TERM. AREA NO.	JKT STRIP LG	SHLD STRIP LG	LEAD CUT LG	INS STRIP LG	TIN	NOTE ONE, FIG	ACCESSORY ITEMS	REMARKS
D 78R			J2-48					.13	NO		15	A
			P17-G41					.18	NO		18	BRANCH 2
D 78Y			J2-49					.13	NO		15	A
			P17-H41					.18	NO		18	BRANCH 2
D 79		5										A
D 79R			J2-1					.13	NO		15	A
			P17-F40					.18	NO		18	BRANCH 2
D 79Y			J2-4					.13	NO		15	A
			P17-F39					.18	NO		18	BRANCH 2
D 80		5										A
D 80R			J2-11					.13	NO		15	A
			P17-H38					.18	NO		18	BRANCH 2
D 80Y			J2-24					.13	NO		15	A
			P17-K38					.18	NO		18	BRANCH 2
D 81		5										A
D 81R			J2-10					.13	NO		15	A
			P17-K39					.18	NO		18	BRANCH 2
D 81Y			J2-2					.13	NO		15	A
			P17-H39					.18	NO		18	BRANCH 2
D 82		5										A

SIZE	CODE IDENT NO.	
A	80230	2014644
SCALE-NONE	REV LTR E	SHEET 30 OF 38

MIL 2084 9-65

LEAD IDENT	WIRE MATL ITEM	LEAD LG	CIRCUIT PT FROM (A) TO (B)	TERM. AREA NO.	JKT STRIP LG	SHLD STRIP LG	LEAD CUT LG	INS STRIP LG	TIN	NOTE ONE, FIG	ACCESSORY ITEMS	REMARKS
D 82R			J2-59					.13	NO		15	A
			P17-H15					.18	NO		18	BRANCH 2
D 82Y			J2-58					.13	NO		15	A
			P17-K15					.18	NO		18	BRANCH 2
D 83		5										A
D 83R			J2-7					.13	NO		15	A
			P17-K14					.18	NO		18	BRANCH 2
D 83Y			J2-6					.13	NO		15	A
			P17-H14					.18	NO		18	BRANCH 2
D 84		5										A
D 84R			J2-36					.13	NO		15	A
			P17-H17					.18	NO		18	BRANCH 2
D 84Y			J2-60					.13	NO		15	A
			P17-K17					.18	NO		18	BRANCH 2
D 85		5										A
D 85R			J2-8					.13	NO		15	A
			P17-K16					.18	NO		18	BRANCH 2
D 85Y			J2-19					.13	NO		15	A
			P17-H16					.18	NO		18	BRANCH 2
D 86		5										A

SIZE	CODE IDENT NO.	
A	80230	2014644
SCALE-NONE	REV LTR E	SHEET 31 OF 38

MIL 2084 9-65

LEAD IDENT	WIRE MATL ITEM	LEAD LG	CIRCUIT PT FROM (A) TO (B)	TERM. AREA NO.	JKT STRIP LG	SHLD STRIP LG	LEAD CUT LG	INS STRIP LG	TIN	NOTE ONE, FIG	ACCESSORY ITEMS	REMARKS
D 86R			J2-61					.13	NO		15	A
			P17-H13					.18	NO		18	BRANCH 2
D 86Y			J2-38					.13	NO		15	A
			P17-K13					.18	NO		18	BRANCH 2
D 87		5										A
D 87R			J2-39					.13	NO		15	A
			P17-K12					.18	NO		18	BRANCH 2
D 87Y			J2-20					.13	NO		15	A
			P17-H12					.18	NO		18	BRANCH 2
D 88		5										A
D 88R			J2-43					.13	NO		15	A
			P17-H21					.18	NO		18	BRANCH 2
D 88Y			J2-42					.13	NO		15	A
			P17-G21					.18	NO		18	BRANCH 2
D 89		5										A
D 89R			J2-22					.13	NO		15	A
			P17-G20					.18	NO		18	BRANCH 2
D 89Y			J2-9					.13	NO		15	A
			P17-H20					.18	NO		18	BRANCH 2
D 90		5										A

SIZE	CODE IDENT NO.	
A	80230	2014644
SCALE-NONE	REV LTR E	SHEET 32 OF 38

MIL 2084 9-65

LEAD IDENT	WIRE MATL ITEM	LEAD LG	CIRCUIT PT FROM (A) TO (B)	TERM. AREA NO.	JKT STRIP LG	SHLD STRIP LG	LEAD CUT LG	INS STRIP LG	TIN	NOTE ONE, FIG	ACCESSORY ITEMS	REMARKS
D 90R			J2-41					.13	NO		15	A
			P17-H19					.18	NO		18	BRANCH 2
D 90Y			J2-40					.13	NO		15	A
			P17-G19					.18	NO		18	BRANCH 2
D 91	3				1.75	1.50				6B	20	
					1.00	.75				6B	20	
D 91A	9		SHLD D91					.20	NO			
			J4-2					.13	NO		16	
D 91B	9		P17-D27					.18	NO		17	BRANCH 1
			SHLD D91					.20	NO			
D 91Y			J4-3					.13	NO		16	
			P17-D26					.18	NO		17	
D 96	7											
D 96G			J1-11					.13	NO		16	
			P17-F8					.18	NO		18	BRANCH 1
D 96R			J1-10					.13	NO		16	
			P17-G7					.18	NO		18	BRANCH 1
D 96Y			J1-9					.13	NO		16	
			P17-F7					.18	NO		18	BRANCH 1
D 97	2		J3-18					.13	NO		16	B
			P17-A15					.18	NO		18	BRANCH 1
D 98	2		J3-36					.13	NO		16	B
			P17-B15					.18	NO		18	BRANCH 1

SIZE	CODE IDENT NO.	
A	80230	2014644
SCALE-NONE	REV LTR E	SHEET 33 OF 38

MIL 2084 9-65

LEAD IDENT	WIRE MATL ITEM	LEAD LG	CIRCUIT PT FROM (A) TO (B)	TERM. AREA NO.	JKT STRIP LG	SHLD STRIP LG	LEAD CUT LG	INS STRIP LG	TIN	NOTE ONE, FIG	ACCESSORY ITEMS	REMARKS
D 99	2		J3-19					.13	NO		16	B
			P17-C15					.18	NO		18	BRANCH 1
D 100	2		J3-62					.13	NO		16	B
			P17-B17					.18	NO		18	BRANCH 1
D 101	2		J3-63					.13	NO		16	B
			P17-C17					.18	NO		18	BRANCH 1
D 102	2		J3-38					.13	NO		16	B
			P17-B18					.18	NO		18	BRANCH 1
D 103	2		J3-84					.13	NO		16	B
			P17-D13					.18	NO		18	BRANCH 1
D 104	2		J3-60					.13	NO		16	B
			P17-D12					.18	NO		18	BRANCH 1
D 105	2		J3-59					.13	NO		16	B
			P17-D11					.18	NO		18	BRANCH 1
D 106	2		J3-41					.13	NO		16	B
			P17-B2					.18	NO		18	BRANCH 1
D 107	2		J3-65					.13	NO		16	B
			P17-B1					.18	NO		18	BRANCH 1
D 108	2		J3-40					.13	NO		16	B
			P17-B3					.18	NO		18	BRANCH 1
D 109	2		J3-42					.13	NO		16	B
			P17-C1					.18	NO		18	BRANCH 1
D 110	2		J3-66					.13	NO		16	B
			P17-D1					.18	NO		18	BRANCH 1

SIZE	CODE IDENT NO.	
A	80230	2014644
SCALE-NONE	REV LTR E	SHEET 34 OF 38

MIL 2084 9-65

LEAD IDENT	WIRE MATL ITEM	LEAD LG	CIRCUIT PT FROM (A) TO (B)	TERM. AREA NO.	JKT STRIP LG	SHLD STRIP LG	LEAD CUT LG	INS STRIP LG	TIN	NOTE ONE, FIG	ACCESSORY ITEMS	REMARKS
D 111	2		J3-21					.13	NO		16	B
			P17-D2					.18	NO		18	BRANCH 1
D 112	2		J3-22					.13	NO		16	B
			P17-C2					.18	NO		18	BRANCH 1
D 113	2		J3-39					.13	NO		16	B
			P17-D3					.18	NO		18	BRANCH 1
D 114	2		J3-64					.13	NO		16	B
			P17-C3					.18	NO		18	BRANCH 1
D 115	2		J3-33					.13	NO		16	B
			P17-A12					.18	NO		18	BRANCH 1
D 116	2		J3-17					.13	NO		16	B
			P17-B12					.18	NO		18	BRANCH 1
D 117	2		J3-57					.13	NO		16	B
			P17-A11					.18	NO		18	BRANCH 1
D 118	2		J3-82					.13	NO		16	B
			P17-B11					.18	NO		18	BRANCH 1
D 119	2		J3-81					.13	NO		16	B
			P17-A14					.18	NO		18	BRANCH 1
D 120	2		J3-80					.13	NO		16	B
			P17-B13					.18	NO		18	BRANCH 1
D 121	2		J3-56					.13	NO		16	B
			P17-A13					.18	NO		18	BRANCH 1
D 122	2		J3-24					.13	NO		16	B
			P17-A9					.18	NO		18	BRANCH 1

SIZE	CODE IDENT NO.	
A	80230	2014644
SCALE-NONE	REV LTR E	SHEET 35 OF 38

MIL 2084 9-65

LEAD IDENT	WIRE MATL ITEM	LEAD LG	CIRCUIT PT FROM (A) TO (B)	TERM. AREA NO.	JKT STRIP LG	SHLD STRIP LG	LEAD CUT LG	INS STRIP LG	TIN	NOTE ONE, FIG	ACCESSORY ITEMS	REMARKS
D 123	2		J3-43					.13	NO		16	B
			P17-C10					.18	NO		18	BRANCH 1
D 124	2		J3-25					.13	NO		16	B
			P17-C9					.18	NO		18	BRANCH 1
D 125	2		J3-23					.13	NO		16	B
			P17-B9					.18	NO		18	BRANCH 1
D 126	2		J3-5					.13	NO		16	B
			P17-D8					.18	NO		18	BRANCH 1
D 127	2		J3-14					.13	NO		16	B
			P17-C8					.18	NO		18	BRANCH 1
D 128	2		J3-4					.13	NO		16	B
			P17-B10					.18	NO		18	BRANCH 1
D 129	2		J3-1					.13	NO		16	B
			P17-A10					.18	NO		18	BRANCH 1
D 130	4				1.75	1.50				68	20	SEE NOTE 30
					1.00	.75				68	20	
D 130A	9		SHLD D130					.20	NO			
			E2					.19	NO			
D 130B	9		P17-C11					.18	NO		18	BRANCH 1
			SHLD D130					.20	NO			
D 130R			J3-3					.13	NO		16	
			P17-D10					.18	NO		17	BRANCH 1
D 130Y			J3-11					.13	NO		16	
			P17-D9					.18	NO		17	BRANCH 1

SIZE	CODE IDENT NO.	
A	80230	2014644
SCALE-NONE	REV LTR E	SHEET 36 OF 38

MIL 2084 9-65

WIRING HARNESS D 2014644 E

LEAD IDENT	WIRE MATL ITEM	LEAD LG	CIRCUIT PT FROM (A) TO (B)	TERM.JKT AREA NO.	STRIP LG	SHLD STRIP LG	LEAD CUT LG	INS STRIP LG	TIN	NOTE ONE, FIG	ACCESSORY ITEMS	REMARKS
D 131	36		E1					.19	NO		38	A
			P17-H40					.19	NO		17	BRANCH 2
D 132	36		E2					.19	NO		39	B
			P17-C12					.19	NO		17	BRANCH 1

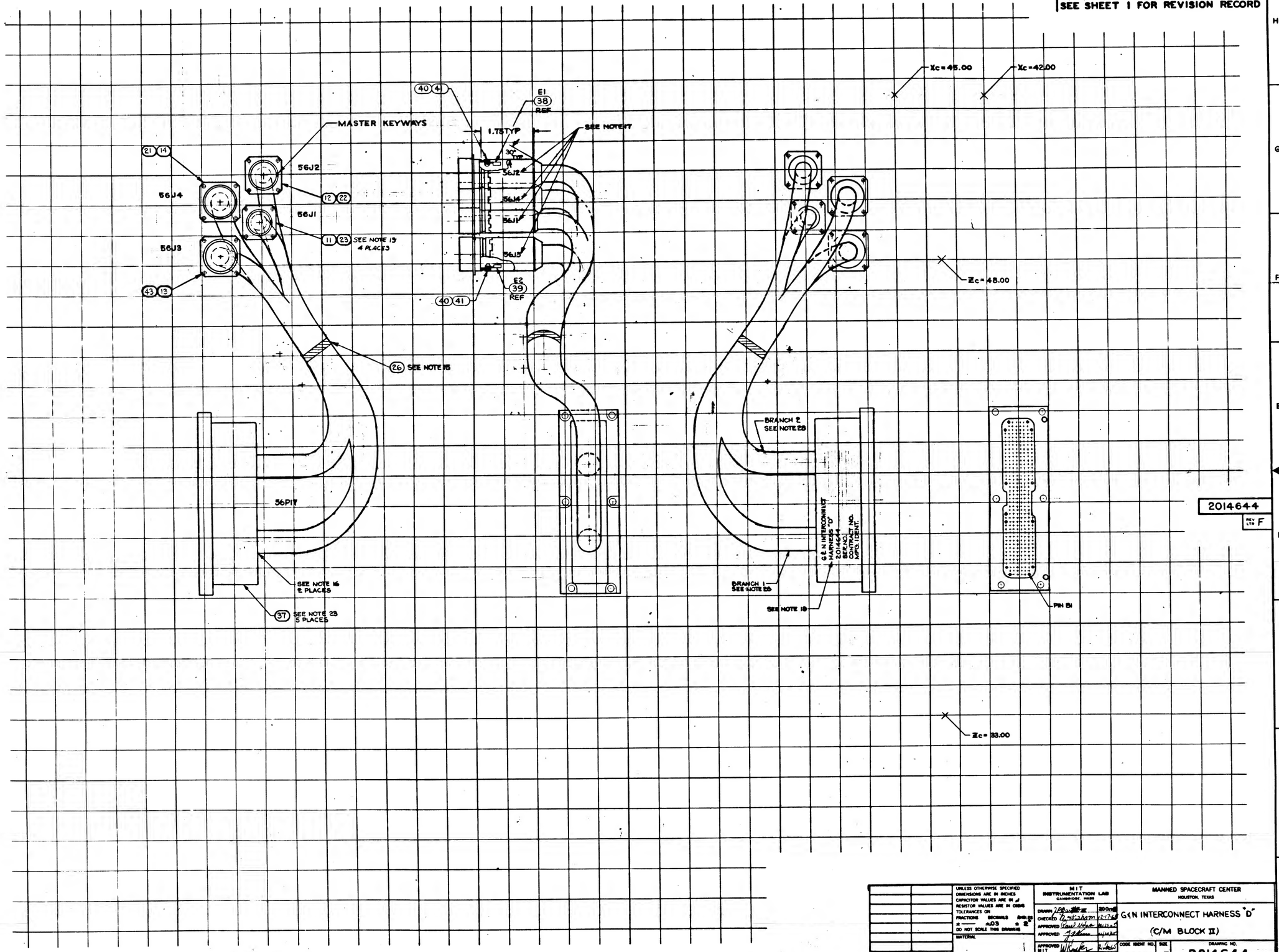
SIZE	CODE IDENT NO.	
A	80230	2014644
SCALE-NONE	REV LTR E	SHEET 37 OF 38

MIL 2064 9-69

REVISIONS REV F JDAR 2-8-69

SYM	ZONE	DESCRIPTION	CHG NO	DATE	APPD

SEE SHEET 1 FOR REVISION RECORD



2014644

REV LTR F

NEXT ASSY	USED ON	UNLESS OTHERWISE SPECIFIED DIMENSIONS ARE IN INCHES CAPACITOR VALUES ARE IN μf RESISTOR VALUES ARE IN OHMS TOLERANCES ON FRACTIONS ± DECIMALS ±.03 ANGLES ± 2° DO NOT SCALE THIS DRAWING MATERIAL	MIT INSTRUMENTATION LAB CAMBRIDGE, MASS. DRAWN CHECKED APPROVED APPROVED APPROVED MIT APPROVED MSC	MANNED SPACECRAFT CENTER HOUSTON, TEXAS G&N INTERCONNECT HARNESS "D" (C/M BLOCK II) CODE IDENT NO. 80230 SIZE E DRAWING NO. 2014644 SCALE 1/1 SHEET 35 OF 38
APPLICATION				

NOTE NUMBER	GENERAL NOTES DESCRIPTION
1	SHIELD TERMINATION FIGURES ARE PER ND1002071 FOR FIGURE 6B AND ND1002032 FOR FIGURE 7.
2	INTERPRET DRAWING IN ACCORDANCE WITH STANDARDS PRESCRIBED BY MIL-D-70327.
3	INTERCONNECT LIST FOR THIS HARNESS IS 2014674.
4	PARTIAL CIRCUIT POINTS ARE SHOWN. PREFIX WITH UNIT NUMBER 56 FOR COMPLETE CIRCUIT POINT
5	THE SUFFIX LETTER OF A CONDUCTOR IDENTIFICATION NUMBER IDENTIFIES A SHIELD LEAD, COLOR, OR MARKED LETTER. A - FROM END OF SHIELD B - TO END OF SHIELD G - GREEN K - BLACK L - BLUE N - BROWN R - RED W - WHITE Y - YELLOW
6	ASTERISK DENOTES LOWER CASE LETTER
7	GRID MODULE ON PICTURE SHEET IS 1 INCH TRUE POSITION
8	UNLESS OTHERWISE SPECIFIED FEATURE CENTERLINES ON PICTURE SHEET ARE LOCATED WITHIN + OR - .25. ENDS OF HOOKUP WIRES OR ACCESSORIES ARE LOCATED WITHIN .12.
9	VENDOR ITEM - SEE SOURCE CONTROL OR SPECIFICATION CONTROL DRAWING.
10	CRIMP CONTACTS PER ND1002032.

SIZE	CODE IDENT NO.	
A	80230	2014644
SCALE-NONE	REV LTR E	SHEET 2 OF 38

MIL 2084 9-65

NOTE NUMBER	GENERAL NOTES DESCRIPTION
11	ALL UNUSED ~~GROMMET HOLES~~ CONTACT CAVITIES SHALL BE FILLED WITH A CONTACT OR CONTACT AND SEALING PLUG AS FOLLOWS CONNECTOR 56J2~~3~~, USE ITEM NUMBERS 15 AND 19. CONNECTOR 56P17, USE ITEM NUMBER 17~~ND1002~~. CONNECTOR 56J1,3, AND 4, USE ITEM NUMBERS 16 AND 19.
12	LACE HARNESS PER ND1002032 USING ITEM NUMBER 24.
13	A SMALL QUANTITY OF POTTING COMPOUND MUST BE PUT BETWEEN THE THREADED PORTION OF CONNECTOR AND SILICONE RUBBER GROMMET TO SEAL AND BOND RING TO CONNECTOR PRIOR TO POTTING.
14	ALL SHIELDED TERMINATIONS SHALL BE LOCATED BELOW REFERENCE LINE A. THERE SHALL BE NO EXPOSED CONDUCTORS AT THE SURFACE OF THE POTTING COMPOUND.
15	BEFORE LACING HARNESS, APPLY 2 TURNS OF TAPE TO INDICATE CABLE CLAMP LOCATION.
16	WRAP TAPE AROUND HARNESS IN AREA SHOWN AS REQUIRED TO BUILD UP DIAMETER TO FIT ~~CABLE CLAMP.~~ SHELL HOLE.
17	MARK CONNECTOR WITH REFERENCE DESIGNATION AS SHOWN .12 HIGH, BLACK, HOT IMPRESSION STAMPING PER ND1002019, CENTRALIZE.
19	MARK CHARACTERS .12 HIGH, BLACK, PER ND1002019, SERIALIZE PER ND1002023.
20	CONTINUITY TEST PER CONDUCTOR CHART. RESISTANCE SHALL BE LESS THAN 1/2 OHM. TEST PER MIL-STD-202, METHOD 303.

SIZE	CODE IDENT NO.	
A	80230	2014644
SCALE-NONE	REV LTR F	SHEET 3 OF 38

MIL 2084 9-65

APPLICATION NEXT ASSY	USED ON	REVISIONS SYM	DESCRIPTION	DATE	APPROVAL
2014567-011	2014567-011	E	REPLACES REV D WITH CHANGE PER TDRR		
		F	ADDED CONFIGURATION & CHANGES PER TDRR 22809	1/24/65	WK
		G	Revised per TDRR 25306	2/4/66	[illegible]

REPLACES REV D WITH CHANGE

| REV | E | E | E

SEE NOTE

LIST OF MATERIALS

NUMBER	ITEM	QTY	PART NO.	DESCRIPTION
	1	1	2014644- 1	WIRE PER 1010789-006, 22AWG, YEL, 5 FT TOT LG
	2	1	2014644- 2	WIRE PER 1010789-016, 26AWG, YEL, 65 FT TOT LG
	3	1	2014644- 3	WIRE PER 1010789-011, 24AWG, YEL YEL JKT, 5 FT TOT LG
	4	1	2014644- 4	WIRE PER 1010789-008, 22 AWG, YEL, RED, 5 FT TOT LG
	5	1	2014644- 5	WIRE PER 1010789-017, 26 AWG, YEL, RED, 50 FT TOT LG
	6	1	2014644- 6	WIRE PER 1010789-015, 26 AWG, YEL, RED, YEL JKT, 60 FT TOT LG
	7	1	2014644- 7	WIRE PER 1010789-018, 26 AWG, YEL, RED, GRN, 5 FT TOT LG
	8	1	2014644- 8	WIRE PER 1010789-013, 24 AWG, YEL, RED, GRN, YEL JKT, 5 FT TOT LG
	9	1	2014644- 9	WIRE PER 1010789-002, 24 AWG, BLK, 78 FT TOT LG
	10	1	2014644- 10	WIRE PER 1010789-024, 26AWG, BLK, 50 FT TOT LG
9	11	1	1010930-009	CONNECTOR, RECEPTACLE, ELECTRICAL (56J1)
9	12	1	1010930-105	CONNECTOR, RECEPTACLE, ELECTRICAL (56J2)
9	13	1	1010930-002	CONNECTOR, RECEPTACLE, ELECTRICAL (56J3)
9	14	1	1010930-001	CONNECTOR, RECEPTACLE, ELECTRICAL (56J4)
9	15	~~REF~~ X	1010770- 1	CONTACT, PIN, SUPPLIED WITH CONNECTOR 1010930

SIZE	CODE IDENT NO.	
A	80230	2014644
SCALE-NONE	REV LTR F	SHEET 6 OF 38

MIL 2084 9-85

SEE NOTE

LIST OF MATERIALS

NUMBER	ITEM	QTY	PART NO.	DESCRIPTION
9	16	~~REF~~ X	1010770- 2	CONTACT, SOCKET, SUPPLIED WITH CONNECTOR 1010930
9	17	168	1010955-001	CONTACT, MALE
9	18	136	1010955-002	CONTACT, MALE
9	19	52	1010958-001	PLUG, PROTECTIVE SEALING
9	20	82	1010402- 2	SLEEVE, SOLDER
	21	1	2014670- 4	ADAPTER, CONNECTOR
	22	1	2014670- 12	ADAPTER, CONNECTOR
	23	1	2014670- 7	ADAPTER, CONNECTOR
	24	AR	1012507-004	TAPE, LACING
	25	AR	MIL-T-23594	TAPE, TEFLON, TYPE II, 1 INCH WIDE
	26	AR	MIL-T-23594	TAPE, TEFLON, TYPE II, 1/4 INCH WIDE
	28	AR	1012503	COMPOUND, POTTING, POLYURETHANE
	29	AR	1010679	ADHESIVE ACTIVATOR
	30	AR	1010661	EPOXY RESIN
	31	AR	1006277	SILICA, PULVERIZED, PYROGENIC
	32	AR	1008822	COLORANT, EPOXY BASE
	33	AR	1012504	PRIMER, METAL PARTS
	34	AR	1010989	TAPE, SHIELDING, EMI/RFI, 16 FT TOT LG

SIZE	CODE IDENT NO.	
A	80230	2014644
SCALE-NONE	REV LTR F	SHEET 7 OF 38

MIL 2084 9-85

NOTE NUMBER — GENERAL NOTES — DESCRIPTION

29 ASSEMBLE A LENGTH OF 25 WIRE BRAID, ITEM 42, OVER CONDUCTOR D130. ALLOW 1.75 INCH OF LEAD TO EXTEND BEYOND BRAID. COVER BRAID WITH TEFLON TAPE, ITEM 34, PER NOTE 26. ALLOW .25 INCH OF BRAID TO EXTEND BEYOND TAPE, FOLD BRAID OVER TAPE AND TERMINATION PER ND1002071 FIGURE 6B.

LEAD TOLERANCE CHART

	LEAD LG	JKT STRIP LG	SHIELD STRIP LG	LEAD CUT LG	INS STRIP LG
UNDER 3 INCHES	+ .12-.00	+.06-.06	+.06-.06	+.06-.06	+.06-.00
3 INCH TO 3 FT	+ .50-.00	+.25-.25	+.25-.25	+.25-.25	
3 FT TO 10 FT	+1.00-.00				
10 FT AND OVER	+2.00-.00				

30 Perform Workmanship Vibration:

A. Sinusoidal sweep at 3.5 g rms. Limited to 0.3 inch peak to peak displacement, from 10 to 2000 cps at a rate of 4 octaves per minute.

B. Vibration along the X axis of the space craft.

C. Monitor for discontinuities of 10μ seconds or greater during vibration.

D. Complete continuity and insulation resistance testing must be assomplished after vibration.

SIZE	CODE IDENT NO.	
A	80230	2014644
SCALE-NONE	REV LTR G	SHEET 5 OF 38

MIL 2084 9-85

SEE NOTE

LIST OF MATERIALS

NUMBER	ITEM	QTY	PART NO.	DESCRIPTION
	35	AR	1006776- 44	INSULATION SLEEVING
	36	1	2014644- 11	WIRE PER QQ-W-343, TYPE C, CLASS C, 22 AWG, 30 FT TOT LG
	37	1	2014744-011	CONNECTOR, PLUG, ELECTRICAL (56P17)
	38	1	MS17182-2	TERMINAL LUG
	39	1	MS17182-1	TERMINAL LUG
	40	2	MS35333-69	WASHER, LOCK
	41	2	1006783- 93	SCREW, BUTTON HD
	42	1	2014644- 12	WIRE BRAID,QQ-B-575,1/8 DIA.,36AWG,2 FT TOT LG
	43	1	2014670- 11	ADAPTER, CONNECTOR

SIZE	CODE IDENT NO.	
A	80230	2014644
SCALE-NONE	REV LTR F	SHEET 8 OF 38

MIL 2084 9-85

WIRING HARNESS D 2014644 E

LEAD IDENT	WIRE MATL ITEM	LEAD LG	CIRCUIT PT FROM (A) TO (B)	TERM. AREA NO.	JKT STRIP LG	SHLD STRIP LG	LEAD CUT LG	INS STRIP LG	TIN	NOTE ONE, FIG	ACCESSORY ITEMS	REMARKS
D	3B	10	P17-G33					.22	NO			BRANCH 2
			SHLD D3					.20	NO			
D	3R		J4-13					.13	NO		16	
			P17-H33					.22	NO			BRANCH 2
D	3Y		J4-14					.13	NO		16	
			P17-K33					.22	NO			BRANCH 2
D	4	6			1.75	1.50				6B	20	
					1.00	.75				6B	20	
D	4A	9	SHLD D4					.20	NO			
			J4-32					.13	NO		16	
D	4B	10	P17-G34					.22	NO			BRANCH 2
			SHLD D4					.20	NO			
D	4R		J4-16					.13	NO		16	
			P17-K34					.22	NO			BRANCH 2
D	4Y		J4-15					.13	NO		16	
			P17-H34					.22	NO			BRANCH 2
D	5	6			1.75	1.50				6B	20	
					1.00	.75				6B	20	
D	5A	9	SHLD D5					.20	NO			
			J4-36					.13	NO		16	
D	5B	9	P17-G29					.18	NO		17	BRANCH 2
			SHLD D5					.20	NO			
D	5R		J4-59					.13	NO		16	
			P17-H29					.18	NO		18	BRANCH 2

SIZE	CODE IDENT NO.	
A	80230	2014644
SCALE-NONE	REV LTR E	SHEET 10 OF 38

MIL 2084 9-65

WIRING HARNESS D 2014644 E

LEAD IDENT	WIRE MATL ITEM	LEAD LG	CIRCUIT PT FROM (A) TO (B)	TERM. AREA NO.	JKT STRIP LG	SHLD STRIP LG	LEAD CUT LG	INS STRIP LG	TIN	NOTE ONE, FIG	ACCESSORY ITEMS	REMARKS
D	5Y		J4-60					.13	NO		16	
			P17-K29					.18	NO		18	BRANCH 2
D	6	6			1.75	1.50				6B	20	
					1.00	.75				6B	20	
D	6A	9	SHLD D6					.20	NO			
			J4-37					.13	NO		16	
D	6B	9	P17-G30					.18	NO		17	BRANCH 2
			SHLD D6					.20	NO			
D	6R		J4-61					.13	NO		16	
			P17-K30					.18	NO		18	BRANCH 2
D	6Y		J4-38					.13	NO		16	
			P17-H30					.18	NO		18	BRANCH 2
D	7	6			1.75	1.50				6B	20	
					1.00	.75				6B	20	
D	7A	9	SHLD D7					.20	NO			
			J4-33					.13	NO		16	
D	7B	10	P17-F27					.22	NO			BRANCH 2
			SHLD D7					.20	NO			
D	7R		J4-56					.13	NO		16	
			P17-F28					.22	NO			BRANCH 2
D	7Y		J4-55					.13	NO		16	
			P17-F29					.22	NO			BRANCH 2
D	8	6			1.75	1.50				6B	20	
					1.00	.75				6B	20	

SIZE	CODE IDENT NO.	
A	80230	2014644
SCALE-NONE	REV LTR E	SHEET 11 OF 38

MIL 2084 9-65

WIRING HARNESS D 2014644 E

LEAD IDENT	WIRE MATL ITEM	LEAD LG	CIRCUIT PT FROM (A) TO (B)	TERM. AREA NO.	JKT STRIP LG	SHLD STRIP LG	LEAD CUT LG	INS STRIP LG	TIN	NOTE ONE, FIG	ACCESSORY ITEMS	REMARKS
D	1	6			1.75	1.50				6B	20	
					1.00	.75				6B	20	
D	1A	9	SHLD D1					.20	NO			
			J4-30					.13	NO		16	
D	1B	9	P17-G31					.18	NO		17	BRANCH 2
			SHLD D1					.20	NO			
D	1R		J4-52					.13	NO		16	
			P17-H31					.18	NO		18	BRANCH 2
D	1Y		J4-51					.13	NO		16	
			P17-K31					.18	NO		18	BRANCH 2
D	2	6			1.75	1.50				6B	20	
					1.00	.75				6B	20	
D	2A	9	SHLD D2					.20	NO			
			J4-31					.13	NO		16	
D	2B	9	P17-G32					.18	NO		17	BRANCH 2
			SHLD D2					.20	NO			
D	2R		J4-54					.13	NO		16	
			P17-K32					.18	NO		18	BRANCH 2
D	2Y		J4-53					.13	NO		16	
			P17-H32					.18	NO		18	BRANCH 2
D	3	6			1.75	1.50				6B	20	
					1.00	.75				6B	20	
D	3A	9	SHLD D3					.20	NO			
			J4-29					.13	NO		16	

SIZE	CODE IDENT NO.	
A	80230	2014644
SCALE-NONE	REV LTR E	SHEET 9 OF 38

MIL 2084 9-65

WIRING HARNESS D 2014644 E

LEAD IDENT	WIRE MATL ITEM	LEAD LG	CIRCUIT PT FROM (A) TO (B)	TERM. AREA NO.	JKT STRIP LG	SHLD STRIP LG	LEAD CUT LG	INS STRIP LG	TIN	NOTE ONE, FIG	ACCESSORY ITEMS	REMARKS
D	8A	9	SHLD D8					.20	NO			
			J4-34					.13	NO		16	
D	8B	10	P17-F33					.22	NO			BRANCH 2
			SHLD D8					.20	NO			
D	8R		J4-57					.13	NO		16	
			P17-F31					.22	NO			BRANCH 2
D	8Y		J4-58					.13	NO		16	
			P17-F32					.22	NO			BRANCH 2
D	9	6			1.75	1.50				6B	20	
					1.00	.75				6B	20	
D	9A	9	SHLD D9					.20	NO			
			J4-27					.13	NO		16	
D	9B	9	P17-G27					.18	NO		17	BRANCH 2
			SHLD D9					.20	NO			
D	9R		J4-48					.13	NO		16	
			P17-H27					.18	NO		18	BRANCH 2
D	9Y		J4-47					.13	NO		16	
			P17-K27					.18	NO		18	BRANCH 2
D	10	6			1.75	1.50				6B	20	
					1.00	.75				6B	20	
D	10A	9	SHLD D10					.20	NO			
			J4-28					.13	NO		16	
D	10B	9	P17-G28					.18	NO		17	BRANCH 2
			SHLD D10					.20	NO			

SIZE	CODE IDENT NO.	
A	80230	2014644
SCALE-NONE	REV LTR E	SHEET 12 OF 38

MIL 2084 9-65

LEAD IDENT	WIRE MATL ITEM	LEAD LG	CIRCUIT PT FROM (A) TO (B)	TERM. AREA NO.	JKT STRIP LG	SHLD STRIP LG	LEAD CUT LG	INS STRIP LG	TIN	NOTE ONE, FIG	ACCESSORY ITEMS	REMARKS
D 13	6				1.75	1.50				6B	20	
					1.00	.75				6B	20	
D 13A	9		SHLD D13					.20	NO			
			J4-22					.13	NO		16	
D 13B	9		P17-C25					.18	NO		17	BRANCH 1
			SHLD D13					.20	NO			
D 13R			J4-41					.13	NO		16	
			P17-A25					.18	NO		18	BRANCH 1
D 13Y			J4-42					.13	NO		16	
			P17-B25					.18	NO		18	BRANCH 1
D 14	6				1.75	1.50				6B	20	
					1.00	.75				6B	20	
D 14A	9		SHLD D14					.20	NO			
			J4-24					.13	NO		16	
D 14B	9		P17-C39					.18	NO		17	BRANCH 2
			SHLD D14					.20	NO			
D 14R			J4-43					.13	NO		16	
			P17-B39					.18	NO		18	BRANCH 2
D 14Y			J4-44					.13	NO		16	
			P17-A39					.18	NO		18	BRANCH 2
D 15	6				1.75	1.50				6B	20	
					1.00	.75				6B	20	
D 15A	9		SHLD D15					.20	NO			
			J4-25					.13	NO		16	

SIZE	CODE IDENT NO.	
A	80230	2014644
SCALE-NONE	REV LTR E	SHEET 14 OF 38

MIL 2084 9-65

LEAD IDENT	WIRE MATL ITEM	LEAD LG	CIRCUIT PT FROM (A) TO (B)	TERM. AREA NO.	JKT STRIP LG	SHLD STRIP LG	LEAD CUT LG	INS STRIP LG	TIN	NOTE ONE, FIG	ACCESSORY ITEMS	REMARKS
D 15B	9		P17-D40					.18	NO		17	BRANCH 2
			SHLD D15					.20	NO			
D 15R			J4-45					.13	NO		16	
			P17-D41					.18	NO		18	BRANCH 2
D 15Y			J4-46					.13	NO		16	
			P17-C41					.18	NO		18	BRANCH 2
D 16	6				1.75	1.50				6B	20	
					1.00	.75				6B	20	
D 16A	9		SHLD D16					.20	NO			
			J4-21					.13	NO		16	
D 16B	9		P17-C24					.18	NO		17	BRANCH 1
			SHLD D16					.20	NO			
D 16R			J4-39					.13	NO		16	
			P17-B24					.18	NO		18	BRANCH 1
D 16Y			J4-40					.13	NO		16	
			P17-D24					.18	NO		18	BRANCH 1
D 17	6				1.75	1.50				6B	20	
					1.00	.75				6B	20	
D 17A	9		SHLD D17					.20	NO			
			J4-10					.13	NO		16	
D 17B	9		P17-C38					.18	NO		17	BRANCH 2
			SHLD D17					.20	NO			
D 17R			J4-9					.13	NO		16	
			P17-A38					.18	NO		18	BRANCH 2

SIZE	CODE IDENT NO.	
A	80230	2014644
SCALE-NONE	REV LTR E	SHEET 15 OF 38

MIL 2084 9-65

LEAD IDENT	WIRE MATL ITEM	LEAD LG	CIRCUIT PT FROM (A) TO (B)	TERM. AREA NO.	JKT STRIP LG	SHLD STRIP LG	LEAD CUT LG	INS STRIP LG	TIN	NOTE ONE, FIG	ACCESSORY ITEMS	REMARKS
D 10R			J4-49					.13	NO		16	
			P17-K28					.18	NO		18	BRANCH 2
D 10Y			J4-50					.13	NO		16	
			P17-H28					.18	NO		18	BRANCH 2
D 11	6				1.75	1.50				6B	20	
					1.00	.75				6B	20	
D 11A	9		SHLD D11					.20	NO			
			J4-35					.13	NO		16	
D 11B	10		P17-G25					.22	NO			BRANCH 1
			SHLD D11					.20	NO			
D 11R			J4-17					.13	NO		16	
			P17-H25					.22	NO			BRANCH 1
D 11Y			J4-18					.13	NO		16	
			P17-K25					.22	NO			BRANCH 1
D 12	6				1.75	1.50				6B	20	
					1.00	.75				6B	20	
D 12A	9		SHLD D12					.20	NO			
			J4-20					.13	NO		16	
D 12B	10		P17-G26					.22	NO			BRANCH 1
			SHLD D12					.20	NO			
D 12R			J4-19					.13	NO		16	
			P17-K26					.22	NO			BRANCH 1
D 12Y			J4-8					.13	NO		16	
			P17-H26					.22	NO			BRANCH 1

SIZE	CODE IDENT NO.	
A	80230	2014644
SCALE-NONE	REV LTR E	SHEET 13 OF 38

MIL 2084 9-65

LEAD IDENT	WIRE MATL ITEM	LEAD LG	CIRCUIT PT FROM (A) TO (B)	TERM. AREA NO.	JKT STRIP LG	SHLD STRIP LG	LEAD CUT LG	INS STRIP LG	TIN	NOTE ONE, FIG	ACCESSORY ITEMS	REMARKS
D 17Y			J4-23					.13	NO		16	
			P17-B38					.18	NO		18	BRANCH 2
D 18	6				1.75	1.50				6B	20	
					1.00	.75				6B	20	
D 18A	9		SHLD D18					.20	NO			
			J4-11					.13	NO		16	
D 18B	9		P17-C40					.18	NO		17	BRANCH 2
			SHLD D18					.20	NO			
D 18R			J4-26					.13	NO		16	
			P17-B41					.18	NO		18	BRANCH 2
D 18Y			J4-12					.13	NO		16	
			P17-B40					.18	NO		18	BRANCH 2
D 19	6				1.75	1.50				6B	20	
					1.00	.75				6B	20	
D 19A	9		SHLD D19					.20	NO			
			J4-1					.13	NO		16	
D 19B	9		P17-C26					.18	NO		17	BRANCH 1
			SHLD D19					.20	NO			
D 19R			J4-6					.13	NO		16	
			P17-B26					.18	NO		18	BRANCH 1
D 19Y			J4-7					.13	NO		16	
			P17-A26					.18	NO		18	BRANCH 1
D 20	1		J4-5					.13	NO		16	
			P17-D25					.18	NO		17	BRANCH 1

SIZE	CODE IDENT NO.	
A	80230	2014644
SCALE-NONE	REV LTR E	SHEET 16 OF 38

MIL 2084 9-65

WIRING HARNESS D 2014644 E

LEAD IDENT	WIRE MATL ITEM	LEAD LG	CIRCUIT PT FROM (A) TO (B)	TERM. AREA NO.	JKT STRIP LG	SHLD STRIP LG	LEAD CUT LG	INS STRIP LG	TIN	NOTE ONE, FIG	ACCESSORY ITEMS	REMARKS
D 24A	9		SHLD D24					.20	NO			
			J1-14					.13	NO		16	
D 24B	9		P17-G3					.18	NO		17	BRANCH 1
			SHLD D24					.20	NO			
D 24R			J1-30					.13	NO		16	
			P17-G2					.18	NO		18	BRANCH 1
D 24Y			J1-29					.13	NO		16	
			P17-G1					.18	NO		18	BRANCH 1
D 25	6				1.75	1.50				6B	20	
					1.00	.75				6B	20	
D 25A	9		SHLD D25					.20	NO			
			J1-15					.13	NO		16	
D 25B	9		P17-H3					.18	NO		17	BRANCH 1
			SHLD D25					.20	NO			
D 25R			J1-31					.13	NO		16	
			P17-H1					.18	NO		18	BRANCH 1
D 25Y			J1-32					.13	NO		16	
			P17-H2					.18	NO		18	BRANCH 1
D 26	6				1.75	1.50				6B	20	
					1.00	.75				6B	20	
D 26A	9		SHLD D26					.20	NO			
			J1-20					.13	NO		16	
D 26B	9		P17-G6					.18	NO		17	BRANCH 1
			SHLD D26					.20	NO			

SIZE	CODE IDENT NO.	
A	80230	2014644
SCALE-NONE	REV LTR E	SHEET 18 OF 38

MIL 2084 9-65

WIRING HARNESS D 2014644 E

LEAD IDENT	WIRE MATL ITEM	LEAD LG	CIRCUIT PT FROM (A) TO (B)	TERM. AREA NO.	JKT STRIP LG	SHLD STRIP LG	LEAD CUT LG	INS STRIP LG	TIN	NOTE ONE, FIG	ACCESSORY ITEMS	REMARKS
D 26R			J1-19					.13	NO		16	
			P17-H6					.18	NO		18	BRANCH 1
D 26Y			J1-37					.13	NO		16	
			P17-K6					.18	NO		18	BRANCH 1
D 27	6				1.75	1.50				6B	20	
					1.00	.75				6B	20	
D 27A	9		SHLD D27					.20	NO			
			J1-21					.13	NO		16	
D 27B	9		P17-G5					.18	NO		17	BRANCH 1
			SHLD D27					.20	NO			
D 27R			J1-38					.13	NO		16	
			P17-K5					.18	NO		18	BRANCH 1
D 27Y			J1-39					.13	NO		16	
			P17-H5					.18	NO		18	BRANCH 1
D 28	6				1.75	1.50				6B	20	
					1.00	.75				6B	20	
D 28A	9		SHLD D28					.20	NO			
			J1-13					.13	NO		16	
D 28B	10		P17-C4					.22	NO			BRANCH 1
			SHLD D28					.20	NO			
D 28R			J1-28					.13	NO		16	
			P17-A4					.22	NO			BRANCH 1
D 28Y			J1-27					.13	NO		16	
			P17-B4					.22	NO			BRANCH 1

SIZE	CODE IDENT NO.	
A	80230	2014644
SCALE-NONE	REV LTR E	SHEET 19 OF 38

MIL 2084 9-65

WIRING HARNESS D 2014644 E

LEAD IDENT	WIRE MATL ITEM	LEAD LG	CIRCUIT PT FROM (A) TO (B)	TERM. AREA NO.	JKT STRIP LG	SHLD STRIP LG	LEAD CUT LG	INS STRIP LG	TIN	NOTE ONE, FIG	ACCESSORY ITEMS	REMARKS
D 21	1		J4-4					.13	NO		16	
			P17-F25					.18	NO		17	BRANCH 1
D 22	6				1.75	1.50				6B	20	
					1.00	.75				6B	20	
D 22A	9		SHLD D22					.20	NO			
			J1-17					.13	NO		16	
D 22B	9		P17-F3					.18	NO		17	BRANCH 1
			SHLD D22					.20	NO			
D 22R			J1-34					.13	NO		16	
			P17-F1					.18	NO		18	BRANCH 1
D 22Y			J1-33					.13	NO		16	
			P17-F2					.18	NO		18	BRANCH 1
D 23	6				1.75	1.50				6B	20	
					1.00	.75				6B	20	
D 23A	9		SHLD D23					.20	NO			
			J1-18					.13	NO		16	
D 23B	9		P17-K3					.18	NO		17	BRANCH 1
			SHLD D23					.20	NO			
D 23R			J1-35					.13	NO		16	
			P17-H4					.18	NO		18	BRANCH 1
D 23Y			J1-36					.13	NO		16	
			P17-K4					.18	NO		18	BRANCH 1
D 24	6				1.75	1.50				6B	20	
					1.00	.75				6B	20	

SIZE	CODE IDENT NO.	
A	80230	2014644
SCALE-NONE	REV LTR E	SHEET 17 OF 38

MIL 2084 9-65

WIRING HARNESS D 2014644 E

LEAD IDENT	WIRE MATL ITEM	LEAD LG	CIRCUIT PT FROM (A) TO (B)	TERM. AREA NO.	JKT STRIP LG	SHLD STRIP LG	LEAD CUT LG	INS STRIP LG	TIN	NOTE ONE, FIG	ACCESSORY ITEMS	REMARKS
D 29	6				1.75	1.50				6B	20	
					1.00	.75				6B	20	
D 29A	9		SHLD D29					.20	NO			
			J1-16					.13	NO		16	
D 29B	10		P17-C5					.22	NO			BRANCH 1
			SHLD D29					.20	NO			
D 29R			J1-6					.13	NO		16	
			P17-B5					.22	NO			BRANCH 1
D 29Y			J1-5					.13	NO		16	
			P17-A5					.22	NO			BRANCH 1
D 30	6				1.75	1.50				6B	20	
					1.00	.75				6B	20	
D 30A	9		SHLD D30					.20	NO			
			J1-1					.13	NO		16	
D 30B	10		P17-C6					.22	NO			BRANCH 1
			SHLD D30					.20	NO			
D 30R			J1-4					.13	NO		16	
			P17-A6					.22	NO			BRANCH 1
D 30Y			J1-3					.13	NO		16	
			P17-B6					.22	NO			BRANCH 1
D 31	7											
D 31G			J1-26					.13	NO		16	
			P17-D4					.18	NO		18	BRANCH 1

SIZE	CODE IDENT NO.	
A	80230	2014644
SCALE-NONE	REV LTR E	SHEET 20 OF 38

MIL 2084 9-65

WIRING HARNESS D — 2014644 — E

LEAD IDENT	WIRE MATL ITEM	LEAD LG	CIRCUIT PT FROM (A) TO (B)	TERM. AREA NO.	JKT STRIP LG	SHLD STRIP LG	LEAD CUT LG	INS STRIP LG	TIN	NOTE ONE, FIG	ACCESSORY ITEMS	REMARKS
D 37Y			J1-42					.13	NO		16	
			P17-K10					.18	NO		17	BRANCH 1
D 40		2	J3-8					.13	NO		16	8
			P17-C16					.18	NO		18	BRANCH 1
D 42		2	J3-7					.13	NO		16	8
			P17-B16					.18	NO		18	BRANCH 1
D 50		2	J3-2					.13	NO		16	8
			P17-C18					.18	NO		18	BRANCH 1
D 55		6			1.75	1.50				6B	20	
					1.00	.75				6B	20	
D 55A		9	SHLD D55					.20	NO			
			J3-30					.13	NO		16	
D 55B		10	P17-C4					.22	NO		17	BRANCH 1
			SHLD D55					.20	NO			
D 55R			J3-31					.13	NO		16	
			P17-A4					.22	NO		17	BRANCH 1
D 55Y			J3-15					.13	NO		16	
			P17-B4					.22	NO		17	BRANCH 1
D 56		6			1.75	1.50				6B	20	
					1.00	.75				6B	20	
D 56A		9	SHLD D56					.20	NO			
			J3-52					.13	NO		16	
D 56B		10	P17-C5					.22	NO		17	BRANCH 1
			SHLD D56					.20	NO			

SIZE	CODE IDENT NO.	
A	80230	2014644
SCALE-NONE	REV LTR E	SHEET 22 OF 38

MIL 2084 9-65

WIRING HARNESS D — 2014644 — E

LEAD IDENT	WIRE MATL ITEM	LEAD LG	CIRCUIT PT FROM (A) TO (B)	TERM. AREA NO.	JKT STRIP LG	SHLD STRIP LG	LEAD CUT LG	INS STRIP LG	TIN	NOTE ONE, FIG	ACCESSORY ITEMS	REMARKS
D 31R			J1-43					.13	NO		16	
			P17-D6					.18	NO		18	BRANCH 1
D 31Y			J1-44					.13	NO		16	
			P17-D5					.18	NO		18	BRANCH 1
D 32		7										
D 32G			J1-8					.13	NO		16	
			P17-F4					.18	NO		18	BRANCH 1
D 32R			J1-7					.13	NO		16	
			P17-F5					.18	NO		18	BRANCH 1
D 32Y			J1-2					.13	NO		16	
			P17-F6					.18	NO		18	BRANCH 1
D 35		2	J1-25					.13	NO		16	
			P17-A3					.18	NO		18	BRANCH 1
D 36		4										
D 36R			J1-40					.13	NO		16	
			P17-K8					.18	NO		17	BRANCH 1
D 36Y			J1-23					.13	NO		16	
			P17-H8					.18	NO		17	BRANCH 1
D 37		4										
D 37R			J1-41					.13	NO		16	
			P17-K9					.18	NO		17	BRANCH 1

SIZE	CODE IDENT NO.	
A	80230	2014644
SCALE-NONE	REV LTR E	SHEET 21 OF 38

MIL 2084 9-65

WIRING HARNESS D — 2014644 — E

LEAD IDENT	WIRE MATL ITEM	LEAD LG	CIRCUIT PT FROM (A) TO (B)	TERM. AREA NO.	JKT STRIP LG	SHLD STRIP LG	LEAD CUT LG	INS STRIP LG	TIN	NOTE ONE, FIG	ACCESSORY ITEMS	REMARKS
D 56R			J3-77					.13	NO		16	
			P17-B5					.22	NO		17	BRANCH 1
D 56Y			J3-53					.13	NO		16	
			P17-A5					.22	NO		17	BRANCH 1
D 57		6			1.75	1.50				6B	20	
					1.00	.75				6B	20	
D 57A		9	SHLD D57					.20	NO			
			J3-51					.13	NO		16	
D 57B		10	P17-C6					.22	NO		17	BRANCH 1
			SHLD D57					.20	NO			
D 57R			J3-75					.13	NO		16	
			P17-A6					.22	NO		17	BRANCH 1
D 57Y			J3-76					.13	NO		16	
			P17-B6					.22	NO		17	BRANCH 1
D 58		6			1.75	1.50				6B	20	
					1.00	.75				6B	20	
D 58A		9	SHLD D58					.20	NO			
			J3-46					.13	NO		16	
D 58B		10	P17-G33					.22	NO		17	BRANCH 2
			SHLD D58					.20	NO			
D 58R			J3-71					.13	NO		16	
			P17-H33					.22	NO		17	BRANCH 2
D 58Y			J3-70					.13	NO		16	
			P17-K33					.22	NO		17	BRANCH 2

SIZE	CODE IDENT NO.	
A	80230	2014644
SCALE-NONE	REV LTR E	SHEET 23 OF 38

MIL 2084 9-65

WIRING HARNESS D — 2014644 — E

LEAD IDENT	WIRE MATL ITEM	LEAD LG	CIRCUIT PT FROM (A) TO (B)	TERM. AREA NO.	JKT STRIP LG	SHLD STRIP LG	LEAD CUT LG	INS STRIP LG	TIN	NOTE ONE, FIG	ACCESSORY ITEMS	REMARKS
D 59		6			1.75	1.50				6B	20	
					1.00	.75				6B	20	
D 59A		9	SHLD D59					.20	NO			
			J3-69					.13	NO		16	
D 59B		10	P17-G34					.22	NO		17	BRANCH 2
			SHLD D59					.20	NO			
D 59R			J3-45					.13	NO		16	
			P17-K34					.22	NO		17	BRANCH 2
D 59Y			J3-44					.13	NO		16	
			P17-H34					.22	NO		17	BRANCH 2
D 60		6			1.75	1.50				6B	20	
					1.00	.75				6B	20	
D 60A		9	SHLD D60					.20	NO			
			J3-28					.13	NO		16	
D 60B		10	P17-F27					.22	NO		17	BRANCH 2
			SHLD D60					.20	NO			
D 60R			J3-13					.13	NO		16	
			P17-F28					.22	NO		17	BRANCH 2
D 60Y			J3-29					.13	NO		16	
			P17-F29					.22	NO		17	BRANCH 2
D 61		6			1.75	1.50				6B	20	
					1.00	.75				6B	20	
D 61A		9	SHLD D61					.20	NO			
			J3-74					.13	NO		16	

SIZE	CODE IDENT NO.	
A	80230	2014644
SCALE-NONE	REV LTR E	SHEET 24 OF 38

MIL 2084 9-65

LEAD IDENT	WIRE MATL ITEM	LEAD LG	CIRCUIT PT FROM (A) TO (B)	TERM. AREA NO.	JKT STRIP LG	SHLD STRIP LG	LEAD CUT LG	INS STRIP LG	TIN	NOTE ONE, FIG	ACCESSORY ITEMS	REMARKS
D 63Y			J3-73					.13	NO		16	
			P17-H26					.22	NO		17	BRANCH 1
D 64	4											
D 64R			J3-67					.13	NO		16	
			P17-H9					.18	NO		17	BRANCH 1
D 64Y			J3-68					.13	NO		16	
			P17-H10					.18	NO		17	BRANCH 1
D 65	8				1.75	1.50				68	20	
					1.00	.75				68	20	
D 65A	9		SHLD D65					.20	NO			
			J2-44					.13	NO		15	
D 65B	9		P17-C21					.18	NO		17	BRANCH 1
			SHLD D65					.20	NO			
D 65G			J2-25					.13	NO		15	
			P17-B21					.18	NO		17	BRANCH 1
D 65R			J2-46					.13	NO		15	
			P17-C20					.18	NO		17	BRANCH 1
D 65Y			J2-45					.13	NO		15	
			P17-B20					.18	NO		17	BRANCH 1
D 66	3				1.75	1.50				68	20	
					1.00	.75				68	20	
D 66A	9		SHLD D66					.20	NO			
			J2-26					.13	NO		15	

SIZE	CODE IDENT NO.	
A	80230	2014644
SCALE-NONE	REV LTR E	SHEET 26 OF 38

MIL 2084 9-65

LEAD IDENT	WIRE MATL ITEM	LEAD LG	CIRCUIT PT FROM (A) TO (B)	TERM. AREA NO.	JKT STRIP LG	SHLD STRIP LG	LEAD CUT LG	INS STRIP LG	TIN	NOTE ONE, FIG	ACCESSORY ITEMS	REMARKS
D 66B	9		P17-B19					.18	NO		17	BRANCH 1
			SHLD D66					.20	NO			
D 66Y			J2-47					.13	NO		15	
			P17-C19					.18	NO		17	
D 67	5											A
D 67R			J2-55					.13	NO		15	A
			P17-A31					.18	NO		18	BRANCH 2
D 67Y			J2-56					.13	NO		15	A
			P17-B31					.18	NO		18	BRANCH 2
D 68	5											A
D 68R			J2-54					.13	NO		15	A
			P17-A32					.18	NO		18	BRANCH 2
D 68Y			J2-32					.13	NO		15	A
			P17-B32					.18	NO		18	BRANCH 2
D 69	5											A
D 69R			J2-17					.13	NO		15	A
			P17-A33					.18	NO		18	BRANCH 2
D 69Y			J2-33					.13	NO		15	A
			P17-B33					.18	NO		18	BRANCH 2
D 70	5											A

SIZE	CODE IDENT NO.	
A	80230	2014644
SCALE-NONE	REV LTR E	SHEET 27 OF

MIL 2084 9-65

LEAD IDENT	WIRE MATL ITEM	LEAD LG	CIRCUIT PT FROM (A) TO (B)	TERM. AREA NO.	JKT STRIP LG	SHLD STRIP LG	LEAD CUT LG	INS STRIP LG	TIN	NOTE ONE, FIG	ACCESSORY ITEMS	REMARKS
D 61B	10		P17-F33					.22	NO		17	BRANCH 2
			SHLD D61					.20	NO			
D 61R			J3-49					.13	NO		16	
			P17-F31					.22	NO		17	BRANCH 2
D 61Y			J3-50					.13	NO		16	
			P17-F32					.22	NO		17	BRANCH 2
D 62	6				1.75	1.50				68	20	
					1.00	.75				68	20	
D 62A	9		SHLD D62					.20	NO			
			J3-27					.13	NO		16	
D 62B	10		P17-G25					.22	NO		17	BRANCH 1
			SHLD D62					.20	NO			
D 62R			J3-26					.13	NO		16	
			P17-H25					.22	NO		17	BRANCH 1
D 62Y			J3-47					.13	NO		16	
			P17-K25					.22	NO		17	BRANCH 1
D 63	6				1.75	1.50				68	20	
					1.00	.75				68	20	
D 63A	9		SHLD D63					.20	NO			
			J3-48					.13	NO		16	
D 63B	10		P17-G26					.22	NO		17	BRANCH 1
			SHLD D63					.20	NO			
D 63R			J3-72					.13	NO		16	
			P17-K26					.22	NO		17	BRANCH 1

SIZE	CODE IDENT NO.	
A	80230	2014644
SCALE-NONE	REV LTR E	SHEET 25 OF 38

MIL 2084 9-65

LEAD IDENT	WIRE MATL ITEM	LEAD LG	CIRCUIT PT FROM (A) TO (B)	TERM. AREA NO.	JKT STRIP LG	SHLD STRIP LG	LEAD CUT LG	INS STRIP LG	TIN	NOTE ONE, FIG	ACCESSORY ITEMS	REMARKS
D 70R			J2-16					.13	NO		15	A
			P17-A34					.18	NO		18	BRANCH 2
D 70Y			J2-5					.13	NO		15	A
			P17-B34					.18	NO		18	BRANCH 2
D 71	5											A
D 71R			J2-57					.13	NO		15	A
			P17-A35					.18	NO		18	BRANCH 2
D 71Y			J2-34					.13	NO		15	A
			P17-B35					.18	NO		18	BRANCH 2
D 72	5											A
D 72R			J2-18					.13	NO		15	A
			P17-A36					.18	NO		18	BRANCH 2
D 72Y			J2-35					.13	NO		15	A
			P17-B36					.18	NO		18	BRANCH 2
D 73	5											A
D 73R			J2-15					.13	NO		15	A
			P17-A28					.18	NO		18	BRANCH 2
D 73Y			J2-30					.13	NO		15	A
			P17-B28					.18	NO		18	BRANCH 2
D 74	5											A

SIZE	CODE IDENT NO.	
A	80230	2014644
SCALE-NONE	REV LTR E	SHEET 28 OF 38

MIL 2084 9-65

WIRING HARNESS D 2014644 E

LEAD IDENT	WIRE MATL ITEM	LEAD LG	CIRCUIT PT FROM (A) TO (B)	TERM. AREA NO.	JKT STRIP LG	SHLD STRIP LG	LEAD CUT LG	INS STRIP LG	TIN	NOTE ONE, FIG	ACCESSORY ITEMS	REMARKS
D 78R			J2-48 P17-G41					.13 .18	NO NO		15 18	A BRANCH 2
D 78Y			J2-49 P17-H41					.13 .18	NO NO		15 18	A BRANCH 2
D 79	5											A
D 79R			J2-1 P17-F40					.13 .18	NO NO		15 18	A BRANCH 2
D 79Y			J2-4 P17-F39					.13 .18	NO NO		15 18	A BRANCH 2
D 80	5											A
D 80R			J2-11 P17-H38					.13 .18	NO NO		15 18	A BRANCH 2
D 80Y			J2-24 P17-K38					.13 .18	NO NO		15 18	A BRANCH 2
D 81	5											A
D 81R			J2-10 P17-K39					.13 .18	NO NO		15 18	A BRANCH 2
D 81Y			J2-2 P17-H39					.13 .18	NO NO		15 18	A BRANCH 2
D 82	5											A

SIZE	CODE IDENT NO.	
A	80230	2014644
SCALE-NONE	REV LTR E	SHEET 30 OF 38

MIL 2084 9-65

WIRING HARNESS D 2014644 E

LEAD IDENT	WIRE MATL ITEM	LEAD LG	CIRCUIT PT FROM (A) TO (B)	TERM. AREA NO.	JKT STRIP LG	SHLD STRIP LG	LEAD CUT LG	INS STRIP LG	TIN	NOTE ONE, FIG	ACCESSORY ITEMS	REMARKS
D 82R			J2-59 P17-H15					.13 .18	NO NO		15 18	A BRANCH 2
D 82Y			J2-58 P17-K15					.13 .18	NO NO		15 18	A BRANCH 2
D 83	5											A
D 83R			J2-7 P17-K14					.13 .18	NO NO		15 18	A BRANCH 2
D 83Y			J2-6 P17-H14					.13 .18	NO NO		15 18	A BRANCH 2
D 84	5											A
D 84R			J2-36 P17-H17					.13 .18	NO NO		15 18	A BRANCH 2
D 84Y			J2-60 P17-K17					.13 .18	NO NO		15 18	A BRANCH 2
D 85	5											A
D 85R			J2-8 P17-K16					.13 .18	NO NO		15 18	A BRANCH 2
D 85Y			J2-19 P17-H16					.13 .18	NO NO		15 18	A BRANCH 2
D 86	5											A

SIZE	CODE IDENT NO.	
A	80230	2014644
SCALE-NONE	REV LTR E	SHEET 31 OF 38

MIL 2084 9-65

WIRING HARNESS D 2014644 E

LEAD IDENT	WIRE MATL ITEM	LEAD LG	CIRCUIT PT FROM (A) TO (B)	TERM. AREA NO.	JKT STRIP LG	SHLD STRIP LG	LEAD CUT LG	INS STRIP LG	TIN	NOTE ONE, FIG	ACCESSORY ITEMS	REMARKS
D 74R			J2-52 P17-A29					.13 .18	NO NO		15 18	A BRANCH 2
D 74Y			J2-53 P17-B29					.13 .18	NO NO		15 18	A BRANCH 2
D 75	5											A
D 75R			J2-50 P17-F37					.13 .18	NO NO		15 18	A BRANCH 2
D 75Y			J2-51 P17-F36					.13 .18	NO NO		15 18	A BRANCH 2
D 76	5											A
D 76R			J2-13 P17-K37					.13 .18	NO NO		15 18	A BRANCH 2
D 76Y			J2-29 P17-H37					.13 .18	NO NO		15 18	A BRANCH 2
D 77	5											A
D 77R			J2-12 P17-H36					.13 .18	NO NO		15 18	A BRANCH 2
D 77Y			J2-27 P17-K36					.13 .18	NO NO		15 18	A BRANCH 2
D 78	5											A

SIZE	CODE IDENT NO.	
A	80230	2014644
SCALE-NONE	REV LTR E	SHEET 29 OF 38

MIL 2084 9-65

WIRING HARNESS D 2014644 E

LEAD IDENT	WIRE MATL ITEM	LEAD LG	CIRCUIT PT FROM (A) TO (B)	TERM. AREA NO.	JKT STRIP LG	SHLD STRIP LG	LEAD CUT LG	INS STRIP LG	TIN	NOTE ONE, FIG	ACCESSORY ITEMS	REMARKS
D 86R			J2-61 P17-H13					.13 .18	NO NO		15 18	A BRANCH 2
D 86Y			J2-38 P17-K13					.13 .18	NO NO		15 18	A BRANCH 2
D 87	5											A
D 87R			J2-39 P17-K12					.13 .18	NO NO		15 18	A BRANCH 2
D 87Y			J2-20 P17-H12					.13 .18	NO NO		15 18	A BRANCH 2
D 88	5											A
D 88R			J2-43 P17-H21					.13 .18	NO NO		15 18	A BRANCH 2
D 88Y			J2-42 P17-G21					.13 .18	NO NO		15 18	A BRANCH 2
D 89	5											A
D 89R			J2-22 P17-G20					.13 .18	NO NO		15 18	A BRANCH 2
D 89Y			J2-9 P17-H20					.13 .18	NO NO		15 18	A BRANCH 2
D 90	5											A

SIZE	CODE IDENT NO.	
A	80230	2014644
SCALE-NONE	REV LTR E	SHEET 32 OF 38

MIL 2084 9-65

WIRING HARNESS D 2014644 E

LEAD IDENT	WIRE MATL ITEM	LEAD LG	CIRCUIT PT FROM (A) TO (B)	TERM. AREA NO.	JKT STRIP LG	SHLD STRIP LG	LEAD CUT LG	INS STRIP LG	TIN	NOTE ONE, FIG	ACCESSORY ITEMS	REMARKS
D 99	2		J3-19					.13	NO		16	B
			P17-C15					.18	NO		18	BRANCH 1
D 100	2		J3-62					.13	NO		16	B
			P17-B17					.18	NO		18	BRANCH 1
D 101	2		J3-63					.13	NO		16	B
			P17-C17					.18	NO		18	BRANCH 1
D 102	2		J3-38					.13	NO		16	B
			P17-B18					.18	NO		18	BRANCH 1
D 103	2		J3-84					.13	NO		16	B
			P17-D13					.18	NO		18	BRANCH 1
D 104	2		J3-60					.13	NO		16	B
			P17-D12					.18	NO		18	BRANCH 1
D 105	2		J3-59					.13	NO		16	B
			P17-D11					.18	NO		18	BRANCH 1
D 106	2		J3-41					.13	NO		16	B
			P17-B2					.18	NO		18	BRANCH 1
D 107	2		J3-65					.13	NO		16	B
			P17-B1					.18	NO		18	BRANCH 1
D 108	2		J3-40					.13	NO		16	B
			P17-B3					.18	NO		18	BRANCH 1
D 109	2		J3-42					.13	NO		16	B
			P17-C1					.18	NO		18	BRANCH 1
D 110	2		J3-66					.13	NO		16	B
			P17-D1					.18	NO		18	BRANCH 1

SIZE	CODE IDENT NO.	
A	80230	2014644
SCALE-NONE	REV LTR E	SHEET 34 OF 38

MIL 2084 9-65

WIRING HARNESS D 2014644 E

LEAD IDENT	WIRE MATL ITEM	LEAD LG	CIRCUIT PT FROM (A) TO (B)	TERM. AREA NO.	JKT STRIP LG	SHLD STRIP LG	LEAD CUT LG	INS STRIP LG	TIN	NOTE ONE, FIG	ACCESSORY ITEMS	REMARKS
D 111	2		J3-21					.13	NO		16	B
			P17-D2					.18	NO		18	BRANCH 1
D 112	2		J3-22					.13	NO		16	B
			P17-C2					.18	NO		18	BRANCH 1
D 113	2		J3-39					.13	NO		16	B
			P17-D3					.18	NO		18	BRANCH 1
D 114	2		J3-64					.13	NO		16	B
			P17-C3					.18	NO		18	BRANCH 1
D 115	2		J3-33					.13	NO		16	B
			P17-A12					.18	NO		18	BRANCH 1
D 116	2		J3-17					.13	NO		16	B
			P17-B12					.18	NO		18	BRANCH 1
D 117	2		J3-57					.13	NO		16	B
			P17-A11					.18	NO		18	BRANCH 1
D 118	2		J3-82					.13	NO		16	B
			P17-B11					.18	NO		18	BRANCH 1
D 119	2		J3-81					.13	NO		16	B
			P17-A14					.18	NO		18	BRANCH 1
D 120	2		J3-80					.13	NO		16	B
			P17-B13					.18	NO		18	BRANCH 1
D 121	2		J3-56					.13	NO		16	B
			P17-A13					.18	NO		18	BRANCH 1
D 122	2		J3-24					.13	NO		16	B
			P17-A9					.18	NO		18	BRANCH 1

SIZE	CODE IDENT NO.	
A	80230	2014644
SCALE-NONE	REV LTR E	SHEET 35 OF 38

MIL 2084 9-65

WIRING HARNESS D 2014644 E

LEAD IDENT	WIRE MATL ITEM	LEAD LG	CIRCUIT PT FROM (A) TO (B)	TERM. AREA NO.	JKT STRIP LG	SHLD STRIP LG	LEAD CUT LG	INS STRIP LG	TIN	NOTE ONE, FIG	ACCESSORY ITEMS	REMARKS
D 90R			J2-41					.13	NO		15	A
			P17-H19					.18	NO		18	BRANCH 2
D 90Y			J2-40					.13	NO		15	A
			P17-G19					.18	NO		18	BRANCH 2
D 91	3				1.75	1.50				68	20	
					1.00	.75				68	20	
D 91A	9		SHLD D91					.20	NO			
			J4-2					.13	NO		16	
D 91B	9		P17-D27					.18	NO		17	BRANCH 1
			SHLD D91					.20	NO			
D 91Y			J4-3					.13	NO		16	
			P17-D26					.18	NO		17	
D 96	7											
D 96G			J1-11					.13	NO		16	
			P17-F8					.18	NO		18	BRANCH 1
D 96R			J1-10					.13	NO		16	
			P17-G7					.18	NO		18	BRANCH 1
D 96Y			J1-9					.13	NO		16	
			P17-F7					.18	NO		18	BRANCH 1
D 97	2		J3-18					.13	NO		16	B
			P17-A15					.18	NO		18	BRANCH 1
D 98	2		J3-36					.13	NO		16	B
			P17-B15					.18	NO		18	BRANCH 1

SIZE	CODE IDENT NO.	
A	80230	2014644
SCALE-NONE	REV LTR E	SHEET 33 OF 38

MIL 2084 9-65

WIRING HARNESS D 2014644 E

LEAD IDENT	WIRE MATL ITEM	LEAD LG	CIRCUIT PT FROM (A) TO (B)	TERM. AREA NO.	JKT STRIP LG	SHLD STRIP LG	LEAD CUT LG	INS STRIP LG	TIN	NOTE ONE, FIG	ACCESSORY ITEMS	REMARKS
D 123	2		J3-43					.13	NO		16	B
			P17-C10					.18	NO		18	BRANCH 1
D 124	2		J3-25					.13	NO		16	B
			P17-C9					.18	NO		18	BRANCH 1
D 125	2		J3-23					.13	NO		16	B
			P17-B9					.18	NO		18	BRANCH 1
D 126	2		J3-5					.13	NO		16	B
			P17-D8					.18	NO		18	BRANCH 1
D 127	2		J3-14					.13	NO		16	B
			P17-C8					.18	NO		18	BRANCH 1
D 128	2		J3-4					.13	NO		16	B
			P17-B10					.18	NO		18	BRANCH 1
D 129	2		J3-1					.13	NO		16	B
			P17-A10					.18	NO		18	BRANCH 1
D 130	4				1.75	1.50				68	20	SEE NOTE 30
					1.00	.75				68	20	
D 130A	9		SHLD D130					.20	NO			
			E2					.19	NO			
D 130B	9		P17-C11					.18	NO		18	BRANCH 1
			SHLD D130					.20	NO			
D 130R			J3-3					.13	NO		16	
			P17-D10					.18	NO		17	BRANCH 1
D 130Y			J3-11					.13	NO		16	
			P17-D9					.18	NO		17	BRANCH 1

SIZE	CODE IDENT NO.	
A	80230	2014644
SCALE-NONE	REV LTR E	SHEET 36 OF 38

MIL 2084 9-65

LEAD IDENT	WIRE MATL ITEM	LEAD LG	CIRCUIT PT FROM (A) TO (B)	TERM.JKT AREA NO.	STRIP LG	SHLD STRIP LG	LEAD CUT LG	INS STRIP LG	TIN	NOTE ONE, FIG	ACCESSORY ITEMS	REMARKS
D 131	36		E1					.19	NO		38	A
			P17-H40					.19	NO		17	BRANCH 2
D 132	36		E2					.19	NO		39	B
			P17-C12					.19	NO		17	BRANCH 1

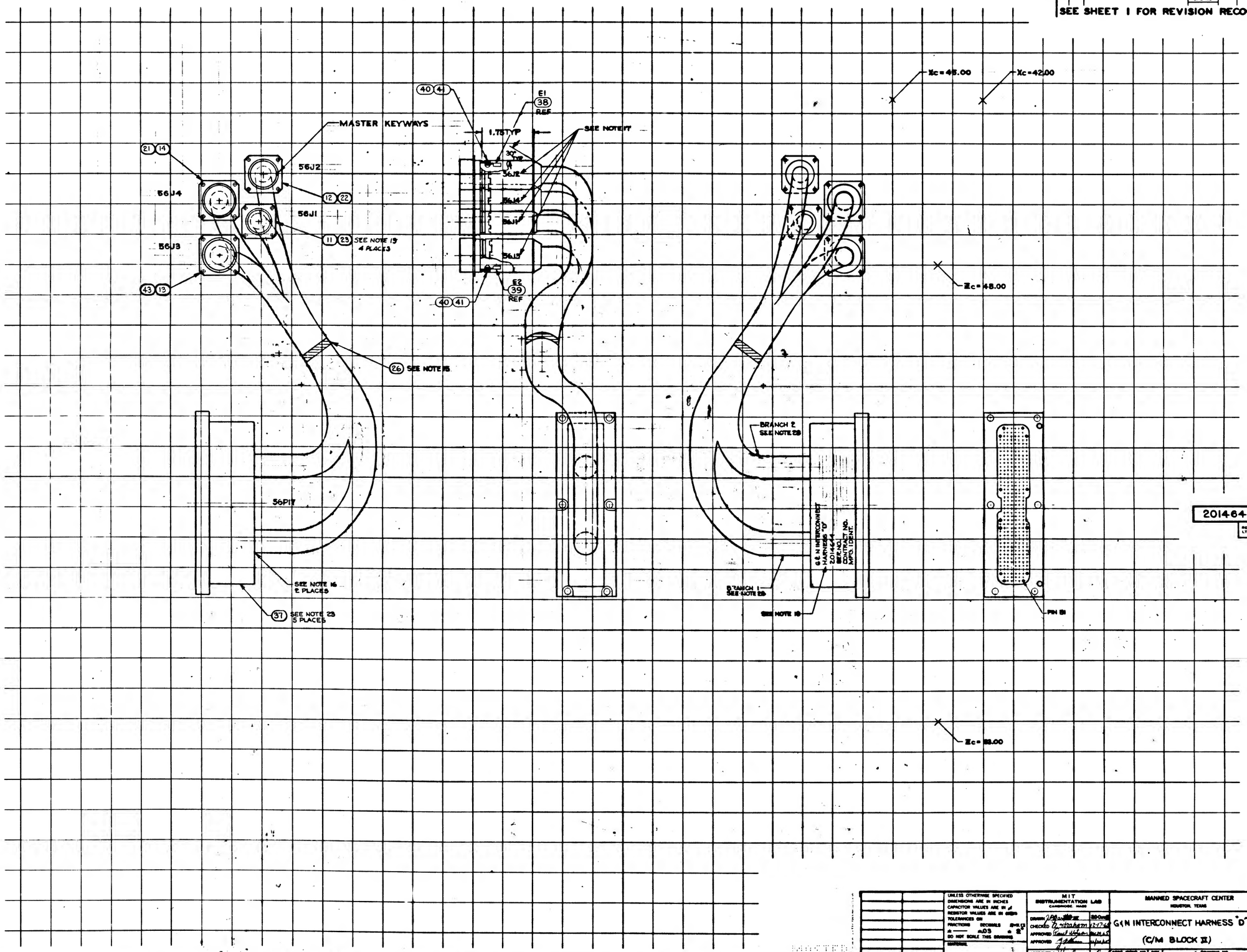
SIZE	CODE IDENT NO.	
A	80230	2014644
SCALE-NONE	REV LTR E	SHEET 37 OF 38

MIL 2064 0-00

REVISIONS REV F TDRR 64809

SYM	ZONE	DESCRIPTION	CHG NO	DATE	APPD

SEE SHEET 1 FOR REVISION RECORD



NEXT ASSY	USED ON	UNLESS OTHERWISE SPECIFIED DIMENSIONS ARE IN INCHES CAPACITOR VALUES ARE IN μf RESISTOR VALUES ARE IN OHMS TOLERANCES ON FRACTIONS ± DECIMALS ±.03 ANGLES ± 2° DO NOT SCALE THIS DRAWING MATERIAL	MIT INSTRUMENTATION LAB CAMBRIDGE, MASS. DRAWN CHECKED APPROVED APPROVED APPROVED MIT APPROVED NASA A. C. MICCIOLO	MANNED SPACECRAFT CENTER HOUSTON, TEXAS G&N INTERCONNECT HARNESS "D" (C/M BLOCK II) CODE IDENT NO. 80230 SIZE E DRAWING NO. 2014644 SCALE 1/1 SHEET 38 OF 38	
APPLICATION					

MASTER

MX-10989

MC 2898 B/TC DIVISION

APPLICATION		REVISIONS			
NEXT ASSY	USED ON	SYM	DESCRIPTION	DATE	APPROVAL
2014567-011	2014567-011	E	REPLACES REV D WITH CHANGE PER TDRR		
		F	ADDED CONFIGURATION & CHANGES PER TDRR 24809	12/21/65	WK
		G	Revised per TDRR 25306	2/4/66	[illegible]
		H	REVISED PER TDRR 28360	5-MAY-66	B. [illegible]

REPLACES REV D WITH CHANGE

REV	G	G	G	G	G	G	G	G	G	G	G	G	G	G	G	H	H
SHEET	20	21	22	23	24	25	26	27	28	29	30	31	32	33	34	35	36	37	38
REV STATUS OF SHEETS	REV							H	G	G	G	H	G	G	H	G	G	G	G	G	G	G	G	G	G
	SHEET							1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16	17	18	19

MIT
INSTRUMENTATION LAB
CAMBRIDGE, MASS

DWG NO CONTRACT

MANNED
SPACECRAFT CENTER
HOUSTON, TEXAS

DRAWN Jandewinde DATE
CHECKED Hayes 3 DEC 65
APPROVAL D. Blinge 3 DEC 65 (Cont DEC 30, 65)
APPROVAL [illegible] 16 Dec 65

G & N INTERCONNECT HARNESS "D"
(C/M, BLOCK II)

NASA APPROVAL [illegible]
MIT APPROVAL [illegible] 21 Dec 65

CODE IDENT NO.	SIZE		RFV
80230	A	2014644	H

CONTRACT NAS 9-497 SCALE — SHEET 1 OF 38

NOTE NUMBER	GENERAL NOTES DESCRIPTION
1	SHIELD TERMINATION FIGURES ARE PER ND1002071 FOR FIGURE 6B AND ND1002032 FOR FIGURE 7.
2	INTERPRET DRAWING IN ACCORDANCE WITH STANDARDS PRESCRIBED BY MIL-D-70327.
3	INTERCONNECT LIST FOR THIS HARNESS IS 2014674.
4	PARTIAL CIRCUIT POINTS ARE SHOWN. PREFIX WITH UNIT NUMBER 56 FOR COMPLETE CIRCUIT POINT
5	THE SUFFIX LETTER OF A CONDUCTOR IDENTIFICATION NUMBER IDENTIFIES A SHIELD LEAD, COLOR, OR MARKED LETTER. A - FROM END OF SHIELD B - TO END OF SHIELD G - GREEN K - BLACK L - BLUE N - BROWN R - RED W - WHITE Y - YELLOW
6	ASTERISK DENOTES LOWER CASE LETTER
7	GRID MODULE ON PICTURE SHEET IS 1 INCH TRUE POSITION
8	UNLESS OTHERWISE SPECIFIED FEATURE CENTERLINES ON PICTURE SHEET ARE LOCATED WITHIN + OR - .25. ENDS OF HOOKUP WIRES OR ACCESSORIES ARE LOCATED WITHIN .12.
9	VENDOR ITEM - SEE SOURCE CONTROL OR SPECIFICATION CONTROL DRAWING.
10	CRIMP CONTACTS PER ND1002032.

NOTE NUMBER	GENERAL NOTES DESCRIPTION
11	ALL UNUSED CONTACT CAVITIES SHALL BE FILLED WITH A CONTACT OR CONTACT AND SEALING PLUG AS FOLLOWS CONNECTOR 56J2, USE ITEM NUMBERS 15 AND 19. CONNECTOR 56P17, USE ITEM NUMBER 17. CONNECTOR 56J1,3, AND 4, USE ITEM NUMBERS 16 AND 19.
12	LACE HARNESS PER ND1002032 USING ITEM NUMBER 24.
13	A SMALL QUANTITY OF POTTING COMPOUND MUST BE PUT BETWEEN THE THREADED PORTION OF CONNECTOR AND SILICONE RUBBER GROMMET TO SEAL AND BOND RING TO CONNECTOR PRIOR TO POTTING.
14	ALL SHIELDED TERMINATIONS SHALL BE LOCATED BELOW REFERENCE LINE A. THERE SHALL BE NO EXPOSED CONDUCTORS AT THE SURFACE OF THE POTTING COMPOUND.
15	BEFORE LACING HARNESS, APPLY 2 TURNS OF TAPE TO INDICATE CABLE CLAMP LOCATION.
16	WRAP TAPE AROUND HARNESS IN AREA SHOWN AS REQUIRED TO BUILD UP DIAMETER TO FIT SHELL HOLE.
17	MARK CONNECTOR WITH REFERENCE DESIGNATION AS SHOWN .12 HIGH, BLACK, HOT IMPRESSION STAMPING PER ND1002019, CENTRALIZE.
19	MARK CHARACTERS .12 HIGH, BLACK, PER ND1002019, SERIALIZE PER ND1002023.
20	CONTINUITY TEST PER CONDUCTOR CHART. RESISTANCE SHALL BE LESS THAN 1/2 OHM. TEST PER MIL-STD-202, METHOD 303.

NOTE NUMBER	GENERAL NOTES DESCRIPTION
21	INSULATION RESISTANCE SHALL BE GREATER THAN 100 MEGOHMS WITH 500 VDC APPLIED BETWEEN A. THE ASSEMBLY PINS AND STRUCTURE GROUND, EXCEPT THOSE PINS ELECTRICALLY CONNECTED TO STRUCTURE GROUND. B. EACH PIN AND ALL OTHER PINS NOT ELECTRICALLY CONNECTED, INCLUDING ALL SPARE PINS. TEST PER MIL-STD-202, METHOD 302, EXCEPT ELECTRIFICATION TIME NOT APPLICABLE.
22	PRESEAL BACK OF CONNECTOR P17 PRIOR TO ENCAPSULATION PER ND1002187 TYPE III USING ITEMS 29,30,31, AND 32.
23	ENCAPSULATE BACK OF CONNECTORS PER ND1002236 USING ITEMS 28 AND 33.
24	CONDUCTORS LISTED WITH AN A OR B IN THE REMARKS COLUMN ARE TO BE ASSEMBLED AS SHOWN ON THE CONFIGURATION DRAWING.
25	GROUP SHIELDING - THREAD ONE CONTINUOUS LENGTH OF GROUND WIRE, ITEM 36, THROUGH CENTER OF EMI/RFI SHIELDING TAPE, ITEM 34. ALLOW 6 INCHES OF GROUND WIRE TO EXTEND BEYOND ENDS OF SHIELDING TAPE. WRAP CABLE WITH ONE CONTINUOUS LENGTH OF PREPARED SHIELDING. SUCCESSIVE TURNS SHALL OVERLAP BY APPROXIMATELY 1/2 THE WIDTH OF THE TAPE, WITH A MINIMUM OF RIDGES AND FOLDS.
26	COMPLETELY COVER SHIELD WITH ONE CONTINUOUS WRAP OF INSULATION TAPE, ITEM 25. SUCCESSIVE TURNS SHALL OVERLAP BY APPROXIMATELY 1/2 THE WIDTH OF THE TAPE WITH A MINIMUM OF RIDGES AND FOLDS.
27	ASSEMBLE INSULATION TUBING, ITEM 35, OVER GROUND WIRE AS REQUIRED TO REACH TERMINATION. ASSEMBLE SHRINK SLEEVING AS SHOWN.
28	CONDUCTORS SHALL ENTER CONNECTOR 56P17 THROUGH THE APPROPRIATE BRANCH SPECIFIED IN THE REMARKS COLUMN.

NOTE NUMBER	GENERAL NOTES DESCRIPTION
29	ASSEMBLE A LENGTH OF WIRE BRAID, ITEM 42, OVER CONDUCTOR D130. ALLOW 1.75 INCH OF LEAD TO EXTEND BEYOND BRAID. COVER BRAID WITH TEFLON TAPE, ITEM 25, PER NOTE 26. ALLOW .25 INCH OF BRAID TO EXTEND BEYOND TAPE, FOLD BRAID OVER TAPE AND TERMINATION PER ND1002071 FIGURE 6B.
30	PERFORM WORKMANSHIP VIBRATION A. SINUSOIDAL SWEEP AT 3.5 G RMS. LIMITED TO 0.3 INCH PEAK TO PEAK DISPLACEMENT, FROM 10 TO 2000 CPS AT A RATE OF 4 OCTAVES PER MINUTE. B. VIBRATION ALONG THE X AXIS OF THE SPACE CRAFT. C. MONITOR FOR DISCONTINUITIES OF 10 MICRO SECONDS OR GREATER DURING VIBRATION. D. COMPLETE CONTINUITY AND INSULATION RESISTANCE TESTING MUST BE ACCOMPLISHED AFTER VIBRATION.
31	BOND NOT PLATE ASSEMBLIES TO CONNECTORS J1, J2, J3 AND J4 PER ND1002004, USING ITEMS 47 AND 48.

LEAD TOLERANCE CHART

	LEAD LG	JKT STRIP LG	SHIELD STRIP LG	LEAD CUT LG	INS STRIP LG
UNDER 3 INCHES	+ .12-.00	+.06-.06	+.06-.06	+.06-.06	+.06-.00
3 INCH TO 3 FT	+ .50-.00	+.25-.25	+.25-.25	+.25-.25	
3 FT TO 10 FT	+1.00-.00				
10 FT AND OVER	+2.00-.00				

SEE NOTE

LIST OF MATERIALS

NUMBER	ITEM	QTY	PART NO.	DESCRIPTION
	1	1	2014644- 1	WIRE PER 1010789-006, 22AWG, YEL, 5 FT TOT LG
	2	1	2014644- 2	WIRE PER 1010789-016, 26AWG, YEL, 65 FT TOT LG
	3	1	2014644- 3	WIRE PER 1010789-011, 24AWG, YEL YEL JKT, 5 FT TOT LG
	4	1	2014644- 4	WIRE PER 1010789-008, 22 AWG, YEL, RED, 5 FT TOT LG
	5	1	2014644- 5	WIRE PER 1010789-017, 26 AWG, YEL, RED, 50 FT TOT LG
	6	1	2014644- 6	WIRE PER 1010789-015, 26 AWG, YEL, RED, YEL JKT, 60 FT TOT LG
	7	1	2014644- 7	WIRE PER 1010789-018, 26 AWG, YEL, RED, GRN, 5 FT TOT LG
	8	1	2014644- 8	WIRE PER 1010789-013, 24 AWG, YEL, RED, GRN, YEL JKT, 5 FT TOT LG
	9	1	2014644- 9	WIRE PER 1010789-002, 24 AWG, BLK, 78 FT TOT LG
	10	1	2014644- 10	WIRE PER 1010789-024, 26AWG, BLK, 50 FT TOT LG
9	11	1	1010930-009	CONNECTOR, RECEPTACLE, ELECTRICAL (56J1)
9	12	1	1010930-105	CONNECTOR, RECEPTACLE, ELECTRICAL (56J2)
9	13	1	1010930-002	CONNECTOR, RECEPTACLE, ELECTRICAL (56J3)
9	14	1	1010930-001	CONNECTOR, RECEPTACLE, ELECTRICAL (56J4)
9	15	X	1010770- 1	CONTACT, PIN, SUPPLIED WITH CONNECTOR 1010930

SIZE	CODE IDENT NO.		
A	80230	2014644	
SCALE-NONE	REV LTR G	SHEET 6 OF 38	

SEE NOTE

LIST OF MATERIALS

NUMBER	ITEM	QTY	PART NO.	DESCRIPTION
9	16	X	1010770- 2	CONTACT, SOCKET, SUPPLIED WITH CONNECTOR 1010930
9	17	168	1010955-001	CONTACT, MALE
9	18	136	1010955-002	CONTACT, MALE
9	19	52	1010958-001	PLUG, PROTECTIVE SEALING
9	20	82	1010402- 2	SLEEVE, SOLDER
	21	1	2014670- 4	ADAPTER, CONNECTOR
	22	1	2014670- 12	ADAPTER, CONNECTOR
	23	1	2014670- 7	ADAPTER, CONNECTOR
	24	AR	1012507-004	TAPE, LACING
	25	AR	MIL-T-23594	TAPE, TEFLON, TYPE II, 1 INCH WIDE
	26	AR	MIL-T-23594	TAPE, TEFLON, TYPE II, 1/4 INCH WIDE
	28	AR	1012503	COMPOUND, POTTING, POLYURETHANE
	29	AR	1010679	ADHESIVE ACTIVATOR
	30	AR	1010661	EPOXY RESIN
	31	AR	1006277	SILICA, PULVERIZED, PYROGENIC
	32	AR	1008822	COLORANT, EPOXY BASE
	33	AR	1012504	PRIMER, METAL PARTS
	34	AR	1010989	TAPE, SHIELDING, EMI/RFI, 16 FT TOT LG

SIZE	CODE IDENT NO.		
A	80230	2014644	
SCALE-NONE	REV LTR G	SHEET 7 OF 38	

SEE NOTE

LIST OF MATERIALS

NUMBER	ITEM	QTY	PART NO.	DESCRIPTION
	35	AR	1006776- 44	INSULATION SLEEVING
	36	1	2014644- 11	WIRE PER QQ-W-343, TYPE C, CLASS C, 22 AWG, 30 FT TOT LG
	37	1	2014744-011	CONNECTOR, PLUG, ELECTRICAL (56P17)
	38		MS17182-2	DELETED
	39	2	MS17182-1	TERMINAL LUG
	40	2	MS35333-69	WASHER, LOCK
	41	2	1006783- 93	SCREW, BUTTON HD
	42	1	2014644- 12	WIRE BRAID,QQ-B-575,1/8 DIA.,36AWG,2 FT TOT LG
	43	1	2014670- 11	ADAPTER, CONNECTOR
	44	2	2010725-011	NUT PLATE ASSEMBLY
	45	1	2010725-021	NUT PLATE ASSEMBLY
	46	1	2010725-031	NUT PLATE ASSEMBLY
	47	AR	1010682	EPOXY RESIN
	48	AR	1010683	CURING AGENT, AMINE

SIZE	CODE IDENT NO.		
A	80230	2014644	
SCALE-NONE	REV LTR H	SHEET 8 OF 38	

LEAD IDENT		WIRE MATL ITEM	LEAD LG	CIRCUIT PT FROM (A) TO (B)	TERM. AREA NO.	JKT STRIP LG	SHLD STRIP LG	LEAD CUT LG	INS STRIP LG	TIN	NOTE ONE, FIG	ACCESSORY ITEMS	REMARKS
D	1	6				1.75 1.00	1.50 .75				68 68	20 20	
D	1A	9		SHLD D1 J4-30					.20 .13	NO NO		 16	
D	1B	9		P17-G31 SHLD D1					.18 .20	NO NO		17	BRANCH 2
D	1R			J4-52 P17-H31					.13 .18	NO NO		16 18	 BRANCH 2
D	1Y			J4-51 P17-K31					.13 .18	NO NO		16 18	 BRANCH 2
D	2	6				1.75 1.00	1.50 .75				68 68	20 20	
D	2A	9		SHLD D2 J4-31					.20 .13	NO NO		 16	
D	2B	9		P17-G32 SHLD D2					.18 .20	NO NO		17	BRANCH 2
D	2R			J4-54 P17-K32					.13 .18	NO NO		16 18	 BRANCH 2
D	2Y			J4-53 P17-H32					.13 .18	NO NO		16 18	 BRANCH 2
D	3	6				1.75 1.00	1.50 .75				68 68	20 20	
D	3A	9		SHLD D3 J4-29					.20 .13	NO NO		 16	

SIZE	CODE IDENT NO.		
A	80230	2014644	
SCALE-NONE	REV LTR G	SHEET 9 OF 38	

LEAD IDENT	WIRE MATL ITEM	LEAD LG	CIRCUIT PT FROM (A) TO (B)	TERM. AREA NO.	JKT STRIP LG	SHLD STRIP LG	LEAD CUT LG	INS STRIP LG	TIN	NOTE ONE, FIG	ACCESSORY ITEMS	REMARKS
D	3B 10		P17-G33					.22	NO			BRANCH 2
			SHLD D3					.20	NO			
D	3R		J4-13					.13	NO		16	
			P17-H33					.22	NO			BRANCH 2
D	3Y		J4-14					.13	NO		16	
			P17-K33					.22	NO			BRANCH 2
D	4 6				1.75	1.50				68	20	
					1.00	.75				68	20	
D	4A 9		SHLD D4					.20	NO			
			J4-32					.13	NO		16	
D	4B 10		P17-G34					.22	NO			BRANCH 2
			SHLD D4					.20	NO			
D	4R		J4-16					.13	NO		16	
			P17-K34					.22	NO			BRANCH 2
D	4Y		J4-15					.13	NO		16	
			P17-H34					.22	NO			BRANCH 2
D	5 6				1.75	1.50				68	20	
					1.00	.75				68	20	
D	5A 9		SHLD D5					.20	NO			
			J4-36					.13	NO		16	
D	5B 9		P17-G29					.18	NO		17	BRANCH 2
			SHLD D5					.20	NO			
D	5R		J4-59					.13	NO		16	
			P17-H29					.18	NO		18	BRANCH 2

SIZE	CODE IDENT NO.	
A	80230	2014644
SCALE-NONE	REV LTR G	SHEET 10 OF 38

MIL 2084 9-65

LEAD IDENT	WIRE MATL ITEM	LEAD LG	CIRCUIT PT FROM (A) TO (B)	TERM. AREA NO.	JKT STRIP LG	SHLD STRIP LG	LEAD CUT LG	INS STRIP LG	TIN	NOTE ONE, FIG	ACCESSORY ITEMS	REMARKS
D	5Y		J4-60					.13	NO		16	
			P17-K29					.18	NO		18	BRANCH 2
D	6 6				1.75	1.50				68	20	
					1.00	.75				68	20	
D	6A 9		SHLD D6					.20	NO			
			J4-37					.13	NO		16	
D	6B 9		P17-G30					.18	NO		17	BRANCH 2
			SHLD D6					.20	NO			
D	6R		J4-61					.13	NO		16	
			P17-K30					.18	NO		18	BRANCH 2
D	6Y		J4-38					.13	NO		16	
			P17-H30					.18	NO		18	BRANCH 2
D	7 6				1.75	1.50				68	20	
					1.00	.75				68	20	
D	7A 9		SHLD D7					.20	NO			
			J4-33					.13	NO		16	
D	7B 10		P17-F27					.22	NO			BRANCH 2
			SHLD D7					.20	NO			
D	7R		J4-56					.13	NO		16	
			P17-F28					.22	NO			BRANCH 2
D	7Y		J4-55					.13	NO		16	
			P17-F29					.22	NO			BRANCH 2
D	8 6				1.75	1.50				68	20	
					1.00	.75				68	20	

SIZE	CODE IDENT NO.	
A	80230	2014644
SCALE-NONE	REV LTR G	SHEET 11 OF 38

MIL 2084 9-65

LEAD IDENT	WIRE MATL ITEM	LEAD LG	CIRCUIT PT FROM (A) TO (B)	TERM. AREA NO.	JKT STRIP LG	SHLD STRIP LG	LEAD CUT LG	INS STRIP LG	TIN	NOTE ONE, FIG	ACCESSORY ITEMS	REMARKS
D	8A 9		SHLD D8					.20	NO			
			J4-34					.13	NO		16	
D	8B 10		P17-F33					.22	NO			BRANCH 2
			SHLD D8					.20	NO			
D	8R		J4-57					.13	NO		16	
			P17-F31					.22	NO			BRANCH 2
D	8Y		J4-58					.13	NO		16	
			P17-F32					.22	NO			BRANCH 2
D	9 6				1.75	1.50				68	20	
					1.00	.75				68	20	
D	9A 9		SHLD D9					.20	NO			
			J4-27					.13	NO		16	
D	9B 9		P17-G27					.18	NO		17	BRANCH 2
			SHLD D9					.20	NO			
D	9R		J4-48					.13	NO		16	
			P17-H27					.18	NO		18	BRANCH 2
D	9Y		J4-47					.13	NO		16	
			P17-K27					.18	NO		18	BRANCH 2
D	10 6				1.75	1.50				68	20	
					1.00	.75				68	20	
D	10A 9		SHLD D10					.20	NO			
			J4-28					.13	NO		16	
D	10B 9		P17-G28					.18	NO		17	BRANCH 2
			SHLD D10					.20	NO			

SIZE	CODE IDENT NO.	
A	80230	2014644
SCALE-NONE	REV LTR G	SHEET 12 OF 38

MIL 2084 9-65

LEAD IDENT	WIRE MATL ITEM	LEAD LG	CIRCUIT PT FROM (A) TO (B)	TERM. AREA NO.	JKT STRIP LG	SHLD STRIP LG	LEAD CUT LG	INS STRIP LG	TIN	NOTE ONE, FIG	ACCESSORY ITEMS	REMARKS
D	10R		J4-49					.13	NO		16	
			P17-K28					.18	NO		18	BRANCH 2
D	10Y		J4-50					.13	NO		16	
			P17-H28					.18	NO		18	BRANCH 2
D	11 6				1.75	1.50				68	20	
					1.00	.75				68	20	
D	11A 9		SHLD D11					.20	NO			
			J4-35					.13	NO		16	
D	11B 10		P17-G25					.22	NO			BRANCH 1
			SHLD D11					.20	NO			
D	11R		J4-17					.13	NO		16	
			P17-H25					.22	NO			BRANCH 1
D	11Y		J4-18					.13	NO		16	
			P17-K25					.22	NO			BRANCH 1
D	12 6				1.75	1.50				68	20	
					1.00	.75				68	20	
D	12A 9		SHLD D12					.20	NO			
			J4-20					.13	NO		16	
D	12B 10		P17-G26					.22	NO			BRANCH 1
			SHLD D12					.20	NO			
D	12R		J4-19					.13	NO		16	
			P17-K26					.22	NO			BRANCH 1
D	12Y		J4-8					.13	NO		16	
			P17-H26					.22	NO			BRANCH 1

SIZE	CODE IDENT NO.	
A	80230	2014644
SCALE-NONE	REV LTR G	SHEET 13 OF 38

MIL 2084 9-65

LEAD IDENT	WIRE MATL ITEM	LEAD LG	CIRCUIT PT FROM (A) TO (B)	TERM. AREA NO.	JKT STRIP LG	SHLD STRIP LG	LEAD CUT LG	INS STRIP LG	TIN	NOTE ONE, FIG	ACCESSORY ITEMS	REMARKS
D 13	6				1.75	1.50				6B	20	
					1.00	.75				6B	20	
D 13A	9		SHLD D13					.20	NO			
			J4-22					.13	NO		16	
D 13B	9		P17-C25					.18	NO		17	BRANCH 1
			SHLD D13					.20	NO			
D 13R			J4-41					.13	NO		16	
			P17-A25					.18	NO		18	BRANCH 1
D 13Y			J4-42					.13	NO		16	
			P17-B25					.18	NO		18	BRANCH 1
D 14	6				1.75	1.50				6B	20	
					1.00	.75				6B	20	
D 14A	9		SHLD D14					.20	NO			
			J4-24					.13	NO		16	
D 14B	9		P17-C39					.18	NO		17	BRANCH 2
			SHLD D14					.20	NO			
D 14R			J4-43					.13	NO		16	
			P17-B39					.18	NO		18	BRANCH 2
D 14Y			J4-44					.13	NO		16	
			P17-A39					.18	NO		18	BRANCH 2
D 15	6				1.75	1.50				6B	20	
					1.00	.75				6B	20	
D 15A	9		SHLD D15					.20	NO			
			J4-25					.13	NO		16	

SIZE	CODE IDENT NO.	
A	80230	2014644
SCALE-NONE	REV LTR G	SHEET 14 OF 30

MIL 2084 9-65

LEAD IDENT	WIRE MATL ITEM	LEAD LG	CIRCUIT PT FROM (A) TO (B)	TERM. AREA NO.	JKT STRIP LG	SHLD STRIP LG	LEAD CUT LG	INS STRIP LG	TIN	NOTE ONE, FIG	ACCESSORY ITEMS	REMARKS
D 15B	9		P17-D40					.18	NO		17	BRANCH 2
			SHLD D15					.20	NO			
D 15R			J4-45					.13	NO		16	
			P17-D41					.18	NO		18	BRANCH 2
D 15Y			J4-46					.13	NO		16	
			P17-C41					.18	NO		18	BRANCH 2
D 16	6				1.75	1.50				6B	20	
					1.00	.75				6B	20	
D 16A	9		SHLD D16					.20	NO			
			J4-21					.13	NO		16	
D 16B	9		P17-C24					.18	NO		17	BRANCH 1
			SHLD D16					.20	NO			
D 16R			J4-39					.13	NO		16	
			P17-B24					.18	NO		18	BRANCH 1
D 16Y			J4-40					.13	NO		16	
			P17-D24					.18	NO		18	BRANCH 1
D 17	6				1.75	1.50				6B	20	
					1.00	.75				6B	20	
D 17A	9		SHLD D17					.20	NO			
			J4-10					.13	NO		16	
D 17B	9		P17-C38					.18	NO		17	BRANCH 2
			SHLD D17					.20	NO			
D 17R			J4-9					.13	NO		16	
			P17-A38					.18	NO		18	BRANCH 2

SIZE	CODE IDENT NO.	
A	80230	2014644
SCALE-NONE	REV LTR G	SHEET 15 OF 30

MIL 2084 9-65

LEAD IDENT	WIRE MATL ITEM	LEAD LG	CIRCUIT PT FROM (A) TO (B)	TERM. AREA NO.	JKT STRIP LG	SHLD STRIP LG	LEAD CUT LG	INS STRIP LG	TIN	NOTE ONE, FIG	ACCESSORY ITEMS	REMARKS
D 17Y			J4-23					.13	NO		16	
			P17-B38					.18	NO		18	BRANCH 2
D 18	6				1.75	1.50				6B	20	
					1.00	.75				6B	20	
D 18A	9		SHLD D18					.20	NO			
			J4-11					.13	NO		16	
D 18B	9		P17-C40					.18	NO		17	BRANCH 2
			SHLD D18					.20	NO			
D 18R			J4-26					.13	NO		16	
			P17-B41					.18	NO		18	BRANCH 2
D 18Y			J4-12					.13	NO		16	
			P17-B40					.18	NO		18	BRANCH 2
D 19	6				1.75	1.50				6B	20	
					1.00	.75				6B	20	
D 19A	9		SHLD D19					.20	NO			
			J4-1					.13	NO		16	
D 19B	9		P17-C26					.18	NO		17	BRANCH 1
			SHLD D19					.20	NO			
D 19R			J4-6					.13	NO		16	
			P17-B26					.18	NO		18	BRANCH 1
D 19Y			J4-7					.13	NO		16	
			P17-A26					.18	NO		18	BRANCH 1
D 20	1		J4-5					.13	NO		16	
			P17-D25					.18	NO		17	BRANCH 1

SIZE	CODE IDENT NO.	
A	80230	2014644
SCALE-NONE	REV LTR G	SHEET 16 OF 30

MIL 2084 9-65

LEAD IDENT	WIRE MATL ITEM	LEAD LG	CIRCUIT PT FROM (A) TO (B)	TERM. AREA NO.	JKT STRIP LG	SHLD STRIP LG	LEAD CUT LG	INS STRIP LG	TIN	NOTE ONE, FIG	ACCESSORY ITEMS	REMARKS
D 21	1		J4-4					.13	NO		16	
			P17-F25					.18	NO		17	BRANCH 1
D 22	6				1.75	1.50				6B	20	
					1.00	.75				6B	20	
D 22A	9		SHLD D22					.20	NO			
			J1-17					.13	NO		16	
D 22B	9		P17-F3					.18	NO		17	BRANCH 1
			SHLD D22					.20	NO			
D 22R			J1-34					.13	NO		16	
			P17-F1					.18	NO		18	BRANCH 1
D 22Y			J1-33					.13	NO		16	
			P17-F2					.18	NO		18	BRANCH 1
D 23	6				1.75	1.50				6B	20	
					1.00	.75				6B	20	
D 23A	9		SHLD D23					.20	NO			
			J1-18					.13	NO		16	
D 23B	9		P17-K3					.18	NO		17	BRANCH 1
			SHLD D23					.20	NO			
D 23R			J1-35					.13	NO		16	
			P17-H4					.18	NO		18	BRANCH 1
D 23Y			J1-36					.13	NO		16	
			P17-K4					.18	NO		18	BRANCH 1
D 24	6				1.75	1.50				6B	20	
					1.00	.75				6B	20	

SIZE	CODE IDENT NO.	
A	80230	2014644
SCALE-NONE	REV LTR G	SHEET 17 OF 30

MIL 2084 9-65

LEAD IDENT	WIRE MATL ITEM	LEAD LG	CIRCUIT PT FROM (A) TO (B)	TERM. AREA NO.	JKT STRIP LG	SHLD STRIP LG	LEAD CUT LG	INS STRIP LG	TIN	NOTE ONE, FIG	ACCESSORY ITEMS	REMARKS
D 24A	9		SHLD D24					.20	NO			
			J1-14					.13	NO		16	
D 24B	9		P17-G3					.18	NO		17	BRANCH 1
			SHLD D24					.20	NO			
D 24R			J1-30					.13	NO		16	
			P17-G2					.18	NO		18	BRANCH 1
D 24Y			J1-29					.13	NO		16	
			P17-G1					.18	NO		18	BRANCH 1
D 25	6				1.75	1.50				6B	20	
					1.00	.75				6B	20	
D 25A	9		SHLD D25					.20	NO			
			J1-15					.13	NO		16	
D 25B	9		P17-H3					.18	NO		17	BRANCH 1
			SHLD D25					.20	NO			
D 25R			J1-31					.13	NO		16	
			P17-H1					.18	NO		18	BRANCH 1
D 25Y			J1-32					.13	NO		16	
			P17-H2					.18	NO		18	BRANCH 1
D 26	6				1.75	1.50				6B	20	
					1.00	.75				6B	20	
D 26A	9		SHLD D26					.20	NO			
			J1-20					.13	NO		16	
D 26B	9		P17-G6					.18	NO		17	BRANCH 1
			SHLD D26					.20	NO			

SIZE	CODE IDENT NO.	
A	80230	2014644
SCALE-NONE	REV LTR G	SHEET 18 OF 38

MIL 2084 9-65

LEAD IDENT	WIRE MATL ITEM	LEAD LG	CIRCUIT PT FROM (A) TO (B)	TERM. AREA NO.	JKT STRIP LG	SHLD STRIP LG	LEAD CUT LG	INS STRIP LG	TIN	NOTE ONE, FIG	ACCESSORY ITEMS	REMARKS
D 26R			J1-19					.13	NO		16	
			P17-H6					.18	NO		18	BRANCH 1
D 26Y			J1-37					.13	NO		16	
			P17-K6					.18	NO		18	BRANCH 1
D 27	6				1.75	1.50				6B	20	
					1.00	.75				6B	20	
D 27A	9		SHLD D27					.20	NO			
			J1-21					.13	NO		16	
D 27B	9		P17-G5					.18	NO		17	BRANCH 1
			SHLD D27					.20	NO			
D 27R			J1-38					.13	NO		16	
			P17-K5					.18	NO		18	BRANCH 1
D 27Y			J1-39					.13	NO		16	
			P17-H5					.18	NO		18	BRANCH 1
D 28	6				1.75	1.50				6B	20	
					1.00	.75				6B	20	
D 28A	9		SHLD D28					.20	NO			
			J1-13					.13	NO		16	
D 28B	10		P17-C4					.22	NO			BRANCH 1
			SHLD D28					.20	NO			
D 28R			J1-28					.13	NO		16	
			P17-A4					.22	NO			BRANCH 1
D 28Y			J1-27					.13	NO		16	
			P17-B4					.22	NO			BRANCH 1

SIZE	CODE IDENT NO.	
A	80230	2014644
SCALE-NONE	REV LTR G	SHEET 19 OF 38

MIL 2084 9-65

LEAD IDENT	WIRE MATL ITEM	LEAD LG	CIRCUIT PT FROM (A) TO (B)	TERM. AREA NO.	JKT STRIP LG	SHLD STRIP LG	LEAD CUT LG	INS STRIP LG	TIN	NOTE ONE, FIG	ACCESSORY ITEMS	REMARKS
D 29	6				1.75	1.50				6B	20	
					1.00	.75				6B	20	
D 29A	9		SHLD D29					.20	NO			
			J1-16					.13	NO		16	
D 29B	10		P17-C5					.22	NO			BRANCH 1
			SHLD D29					.20	NO			
D 29R			J1-6					.13	NO		16	
			P17-B5					.22	NO			BRANCH 1
D 29Y			J1-5					.13	NO		16	
			P17-A5					.22	NO			BRANCH 1
D 30	6				1.75	1.50				6B	20	
					1.00	.75				6B	20	
D 30A	9		SHLD D30					.20	NO			
			J1-1					.13	NO		16	
D 30B	10		P17-C6					.22	NO			BRANCH 1
			SHLD D30					.20	NO			
D 30R			J1-4					.13	NO		16	
			P17-A6					.22	NO			BRANCH 1
D 30Y			J1-3					.13	NO		16	
			P17-B6					.22	NO			BRANCH 1
D 31	7											
D 31G			J1-26					.13	NO		16	
			P17-D4					.18	NO		18	BRANCH 1

SIZE	CODE IDENT NO.	
A	80230	2014644
SCALE-NONE	REV LTR G	SHEET 20 OF 38

MIL 2084 9-65

LEAD IDENT	WIRE MATL ITEM	LEAD LG	CIRCUIT PT FROM (A) TO (B)	TERM. AREA NO.	JKT STRIP LG	SHLD STRIP LG	LEAD CUT LG	INS STRIP LG	TIN	NOTE ONE, FIG	ACCESSORY ITEMS	REMARKS
D 31R			J1-43					.13	NO		16	
			P17-D6					.18	NO		18	BRANCH 1
D 31Y			J1-44					.13	NO		16	
			P17-D5					.18	NO		18	BRANCH 1
D 32	7											
D 32G			J1-8					.13	NO		16	
			P17-F4					.18	NO		18	BRANCH 1
D 32R			J1-7					.13	NO		16	
			P17-F5					.18	NO		18	BRANCH 1
D 32Y			J1-2					.13	NO		16	
			P17-F6					.18	NO		18	BRANCH 1
D 35	2		J1-25					.13	NO		16	
			P17-A3					.18	NO		18	BRANCH 1
D 36	4											
D 36R			J1-40					.13	NO		16	
			P17-K8					.18	NO		17	BRANCH 1
D 36Y			J1-23					.13	NO		16	
			P17-H8					.18	NO		17	BRANCH 1
D 37	4											
D 37R			J1-41					.13	NO		16	
			P17-K9					.18	NO		17	BRANCH 1

SIZE	CODE IDENT NO.	
A	80230	2014644
SCALE-NONE	REV LTR G	SHEET 21 OF 38

MIL 2084 9-65

LEAD IDENT	WIRE MATL ITEM	LEAD LG	CIRCUIT PT FROM (A) TO (B)	TERM. AREA NO.	JKT STRIP LG	SHLD STRIP LG	LEAD CUT LG	INS STRIP LG	TIN	NOTE ONE, FIG	ACCESSORY ITEMS	REMARKS
D 37Y			J1-42					.13	NO		16	
			P17-K10					.18	NO		17	BRANCH 1
D 40	2		J3-8					.13	NO		16	B
			P17-C16					.18	NO		18	BRANCH 1
D 42	2		J3-7					.13	NO		16	B
			P17-B16					.18	NO		18	BRANCH 1
D 50	2		J3-2					.13	NO		16	B
			P17-C18					.18	NO		18	BRANCH 1
D 55	6				1.75	1.50				6B	20	
					1.00	.75				6B	20	
D 55A	9		SHLD D55					.20	NO			
			J3-30					.13	NO		16	
D 55B	10		P17-C4					.22	NO		17	BRANCH 1
			SHLD D55					.20	NO			
D 55R			J3-31					.13	NO		16	
			P17-A4					.22	NO		17	BRANCH 1
D 55Y			J3-15					.13	NO		16	
			P17-B4					.22	NO		17	BRANCH 1
D 56	6				1.75	1.50				6B	20	
					1.00	.75				6B	20	
D 56A	9		SHLD D56					.20	NO			
			J3-52					.13	NO		16	
D 56B	10		P17-C5					.22	NO		17	BRANCH 1
			SHLD D56					.20	NO			

SIZE	CODE IDENT NO.	
A	80230	2014644
SCALE-NONE	REV LTR G	SHEET 22 OF 30

MIL 2084 9-65

LEAD IDENT	WIRE MATL ITEM	LEAD LG	CIRCUIT PT FROM (A) TO (B)	TERM. AREA NO.	JKT STRIP LG	SHLD STRIP LG	LEAD CUT LG	INS STRIP LG	TIN	NOTE ONE, FIG	ACCESSORY ITEMS	REMARKS
D 56R			J3-77					.13	NO		16	
			P17-B5					.22	NO		17	BRANCH 1
D 56Y			J3-53					.13	NO		16	
			P17-A5					.22	NO		17	BRANCH 1
D 57	6				1.75	1.50				6B	20	
					1.00	.75				6B	20	
D 57A	9		SHLD D57					.20	NO			
			J3-51					.13	NO		16	
D 57B	10		P17-C6					.22	NO		17	BRANCH 1
			SHLD D57					.20	NO			
D 57R			J3-75					.13	NO		16	
			P17-A6					.22	NO		17	BRANCH 1
D 57Y			J3-76					.13	NO		16	
			P17-B6					.22	NO		17	BRANCH 1
D 58	6				1.75	1.50				6B	20	
					1.00	.75				6B	20	
D 58A	9		SHLD D58					.20	NO			
			J3-46					.13	NO		16	
D 58B	10		P17-G33					.22	NO		17	BRANCH 2
			SHLD D58					.20	NO			
D 58R			J3-71					.13	NO		16	
			P17-H33					.22	NO		17	BRANCH 2
D 58Y			J3-70					.13	NO		16	
			P17-K33					.22	NO		17	BRANCH 2

SIZE	CODE IDENT NO.	
A	80230	2014644
SCALE-NONE	REV LTR G	SHEET 23 OF 30

MIL 2084 9-65

LEAD IDENT	WIRE MATL ITEM	LEAD LG	CIRCUIT PT FROM (A) TO (B)	TERM. AREA NO.	JKT STRIP LG	SHLD STRIP LG	LEAD CUT LG	INS STRIP LG	TIN	NOTE ONE, FIG	ACCESSORY ITEMS	REMARKS
D 59	6				1.75	1.50				6B	20	
					1.00	.75				6B	20	
D 59A	9		SHLD D59					.20	NO			
			J3-69					.13	NO		16	
D 59B	10		P17-G34					.22	NO		17	BRANCH 2
			SHLD D59					.20	NO			
D 59R			J3-45					.13	NO		16	
			P17-K34					.22	NO		17	BRANCH 2
D 59Y			J3-44					.13	NO		16	
			P17-H34					.22	NO		17	BRANCH 2
D 60	6				1.75	1.50				6B	20	
					1.00	.75				6B	20	
D 60A	9		SHLD D60					.20	NO			
			J3-28					.13	NO		16	
D 60B	10		P17-F27					.22	NO		17	BRANCH 2
			SHLD D60					.20	NO			
D 60R			J3-13					.13	NO		16	
			P17-F28					.22	NO		17	BRANCH 2
D 60Y			J3-29					.13	NO		16	
			P17-F29					.22	NO		17	BRANCH 2
D 61	6				1.75	1.50				6B	20	
					1.00	.75				6B	20	
D 61A	9		SHLD D61					.20	NO			
			J3-74					.13	NO		16	

SIZE	CODE IDENT NO.	
A	80230	2014644
SCALE-NONE	REV LTR G	SHEET 24 OF 30

MIL 2084 9-65

LEAD IDENT	WIRE MATL ITEM	LEAD LG	CIRCUIT PT FROM (A) TO (B)	TERM. AREA NO.	JKT STRIP LG	SHLD STRIP LG	LEAD CUT LG	INS STRIP LG	TIN	NOTE ONE, FIG	ACCESSORY ITEMS	REMARKS
D 61B	10		P17-F33					.22	NO		17	BRANCH 2
			SHLD D61					.20	NO			
D 61R			J3-49					.13	NO		16	
			P17-F31					.22	NO		17	BRANCH 2
D 61Y			J3-50					.13	NO		16	
			P17-F32					.22	NO		17	BRANCH 2
D 62	6				1.75	1.50				6B	20	
					1.00	.75				6B	20	
D 62A	9		SHLD D62					.20	NO			
			J3-27					.13	NO		16	
D 62B	10		P17-G25					.22	NO		17	BRANCH 1
			SHLD D62					.20	NO			
D 62R			J3-26					.13	NO		16	
			P17-H25					.22	NO		17	BRANCH 1
D 62Y			J3-47					.13	NO		16	
			P17-K25					.22	NO		17	BRANCH 1
D 63	6				1.75	1.50				6B	20	
					1.00	.75				6B	20	
D 63A	9		SHLD D63					.20	NO			
			J3-48					.13	NO		16	
D 63B	10		P17-G26					.22	NO		17	BRANCH 1
			SHLD D63					.20	NO			
D 63R			J3-72					.13	NO		16	
			P17-K26					.22	NO		17	BRANCH 1

SIZE	CODE IDENT NO.	
A	80230	2014644
SCALE-NONE	REV LTR G	SHEET 25 OF 30

MIL 2084 9-65

LEAD IDENT	WIRE MATL ITEM	LEAD LG	CIRCUIT PT FROM (A) TO (B)	TERM. AREA NO.	JKT STRIP LG	SHLD STRIP LG	LEAD CUT LG	INS STRIP LG	TIN	NOTE ONE, FIG	ACCESSORY ITEMS	REMARKS
D 63Y			J3-73					.13	NO		16	
			P17-H26					.22	NO		17	BRANCH 1
D 64	4											
D 64R			J3-67					.13	NO		16	
			P17-H9					.18	NO		17	BRANCH 1
D 64Y			J3-68					.13	NO		16	
			P17-H10					.18	NO		17	BRANCH 1
D 65	8				1.75	1.50				6B	20	
					1.00	.75				6B	20	
D 65A	9		SHLD D65					.20	NO			
			J2-44					.13	NO		15	
D 65B	9		P17-C21					.18	NO		17	BRANCH 1
			SHLD D65					.20	NO			
D 65G			J2-25					.13	NO		15	
			P17-B21					.18	NO		17	BRANCH 1
D 65R			J2-46					.13	NO		15	
			P17-C20					.18	NO		17	BRANCH 1
D 65Y			J2-45					.13	NO		15	
			P17-B20					.18	NO		17	BRANCH 1
D 66	3				1.75	1.50				6B	20	
					1.00	.75				6B	20	
D 66A	9		SHLD D66					.20	NO			
			J2-26					.13	NO		15	

SIZE	CODE IDENT NO.	
A	80230	2014644
SCALE-NONE	REV LTR G	SHEET 26 OF 30

MIL 2084 9-65

LEAD IDENT	WIRE MATL ITEM	LEAD LG	CIRCUIT PT FROM (A) TO (B)	TERM. AREA NO.	JKT STRIP LG	SHLD STRIP LG	LEAD CUT LG	INS STRIP LG	TIN	NOTE ONE, FIG	ACCESSORY ITEMS	REMARKS
D 66B	9		P17-B19					.18	NO		17	BRANCH 1
			SHLD D66					.20	NO			
D 66Y			J2-47					.13	NO		15	
			P17-C19					.18	NO		17	
D 67	5											A
D 67R			J2-55					.13	NO		15	A
			P17-A31					.18	NO		18	BRANCH 2
D 67Y			J2-56					.13	NO		15	A
			P17-B31					.18	NO		18	BRANCH 2
D 68	5											A
D 68R			J2-54					.13	NO		15	A
			P17-A32					.18	NO		18	BRANCH 2
D 68Y			J2-32					.13	NO		15	A
			P17-B32					.18	NO		18	BRANCH 2
D 69	5											A
D 69R			J2-17					.13	NO		15	A
			P17-A33					.18	NO		18	BRANCH 2
D 69Y			J2-33					.13	NO		15	A
			P17-333					.18	NO		18	BRANCH 2
D 70	5											A

SIZE	CODE IDENT NO.	
A	80230	2014644
SCALE-NONE	REV LTR G	SHEET 27 OF 30

MIL 2084 9-65

LEAD IDENT	WIRE MATL ITEM	LEAD LG	CIRCUIT PT FROM (A) TO (B)	TERM. AREA NO.	JKT STRIP LG	SHLD STRIP LG	LEAD CUT LG	INS STRIP LG	TIN	NOTE ONE, FIG	ACCESSORY ITEMS	REMARKS
D 70R			J2-16					.13	NO		15	A
			P17-A34					.18	NO		18	BRANCH 2
D 70Y			J2-5					.13	NO		15	A
			P17-B34					.18	NO		18	BRANCH 2
D 71	5											A
D 71R			J2-57					.13	NO		15	A
			P17-A35					.18	NO		18	BRANCH 2
D 71Y			J2-34					.13	NO		15	A
			P17-B35					.18	NO		18	BRANCH 2
D 72	5											A
D 72R			J2-18					.13	NO		15	A
			P17-A36					.18	NO		18	BRANCH 2
D 72Y			J2-35					.13	NO		15	A
			P17-B36					.18	NO		18	BRANCH 2
D 73	5											A
D 73R			J2-15					.13	NO		15	A
			P17-A28					.18	NO		18	BRANCH 2
D 73Y			J2-30					.13	NO		15	A
			P17-B28					.18	NO		18	BRANCH 2
D 74	5											A

SIZE	CODE IDENT NO.	
A	80230	2014644
SCALE-NONE	REV LTR G	SHEET 28 OF 30

MIL 2084 9-65

LEAD IDENT	WIRE MATL ITEM	LEAD LG	CIRCUIT PT FROM (A) TO (B)	TERM. AREA NO.	JKT STRIP LG	SHLD STRIP LG	LEAD CUT LG	INS STRIP LG	TIN	NOTE ONE, FIG	ACCESSORY ITEMS	REMARKS
D 74R			J2-52					.13	NO		15	A
			P17-A29					.18	NO		18	BRANCH 2
D 74Y			J2-53					.13	NO		15	A
			P17-B29					.18	NO		18	BRANCH 2
D 75	5											A
D 75R			J2-50					.13	NO		15	A
			P17-F37					.18	NO		18	BRANCH 2
D 75Y			J2-51					.13	NO		15	A
			P17-F36					.18	NO		18	BRANCH 2
D 76	5											A
D 76R			J2-13					.13	NO		15	A
			P17-K37					.18	NO		18	BRANCH 2
D 76Y			J2-29					.13	NO		15	A
			P17-H37					.18	NO		18	BRANCH 2
D 77	5											A
D 77R			J2-12					.13	NO		15	A
			P17-H36					.18	NO		18	BRANCH 2
D 77Y			J2-27					.13	NO		15	A
			P17-K36					.18	NO		18	BRANCH 2
D 78	5											A

SIZE	CODE IDENT NO.	
A	80230	2014644
SCALE-NONE	REV LTR G	SHEET 29 OF 30

MIL 2084 9-65

LEAD IDENT	WIRE MATL ITEM	LEAD LG	CIRCUIT PT FROM (A) TO (B)	TERM. AREA NO.	JKT STRIP LG	SHLD STRIP LG	LEAD CUT LG	INS STRIP LG	TIN	NOTE ONE, FIG	ACCESSORY ITEMS	REMARKS
D 78R			J2-48					.13	NO		15	A
			P17-G41					.18	NO		18	BRANCH 2
D 78Y			J2-49					.13	NO		15	A
			P17-H41					.18	NO		18	BRANCH 2
D 79	5											A
D 79R			J2-1					.13	NO		15	A
			P17-F40					.18	NO		18	BRANCH 2
D 79Y			J2-4					.13	NO		15	A
			P17-F39					.18	NO		18	BRANCH 2
D 80	5											A
D 80R			J2-11					.13	NO		15	A
			P17-H38					.18	NO		18	BRANCH 2
D 80Y			J2-24					.13	NO		15	A
			P17-K38					.18	NO		18	BRANCH 2
D 81	5											A
D 81R			J2-10					.13	NO		15	A
			P17-K39					.18	NO		18	BRANCH 2
D 81Y			J2-2					.13	NO		15	A
			P17-H39					.18	NO		18	BRANCH 2
D 82	5											A

SIZE	CODE IDENT NO.		
A	80230	2014644	
SCALE-NONE	REV LTR G	SHEET 30 OF 30	

MIL 2084 9-65

LEAD IDENT	WIRE MATL ITEM	LEAD LG	CIRCUIT PT FROM (A) TO (B)	TERM. AREA NO.	JKT STRIP LG	SHLD STRIP LG	LEAD CUT LG	INS STRIP LG	TIN	NOTE ONE, FIG	ACCESSORY ITEMS	REMARKS
D 82R			J2-59					.13	NO		15	A
			P17-H15					.18	NO		18	BRANCH 2
D 82Y			J2-58					.13	NO		15	A
			P17-K15					.18	NO		18	BRANCH 2
D 83	5											A
D 83R			J2-7					.13	NO		15	A
			P17-K14					.18	NO		18	BRANCH 2
D 83Y			J2-6					.13	NO		15	A
			P17-H14					.18	NO		18	BRANCH 2
D 84	5											A
D 84R			J2-36					.13	NO		15	A
			P17-H17					.18	NO		18	BRANCH 2
D 84Y			J2-60					.13	NO		15	A
			P17-K17					.18	NO		18	BRANCH 2
D 85	5											A
D 85R			J2-8					.13	NO		15	A
			P17-K16					.18	NO		18	BRANCH 2
D 85Y			J2-19					.13	NO		15	A
			P17-H16					.18	NO		18	BRANCH 2
D 86	5											A

SIZE	CODE IDENT NO.		
A	80230	2014644	
SCALE-NONE	REV LTR G	SHEET 31 OF 30	

MIL 2084 9-65

LEAD IDENT	WIRE MATL ITEM	LEAD LG	CIRCUIT PT FROM (A) TO (B)	TERM. AREA NO.	JKT STRIP LG	SHLD STRIP LG	LEAD CUT LG	INS STRIP LG	TIN	NOTE ONE, FIG	ACCESSORY ITEMS	REMARKS
D 86R			J2-61					.13	NO		15	A
			P17-H13					.18	NO		18	BRANCH 2
D 86Y			J2-38					.13	NO		15	A
			P17-K13					.18	NO		18	BRANCH 2
D 87	5											A
D 87R			J2-39					.13	NO		15	A
			P17-K12					.18	NO		18	BRANCH 2
D 87Y			J2-20					.13	NO		15	A
			P17-H12					.18	NO		18	BRANCH 2
D 88	5											A
D 88R			J2-43					.13	NO		15	A
			P17-H21					.18	NO		18	BRANCH 2
D 88Y			J2-42					.13	NO		15	A
			P17-G21					.18	NO		18	BRANCH 2
D 89	5											A
D 89R			J2-22					.13	NO		15	A
			P17-G20					.18	NO		18	BRANCH 2
D 89Y			J2-9					.13	NO		15	A
			P17-H20					.18	NO		18	BRANCH 2
D 90	5											A

SIZE	CODE IDENT NO.		
A	80230	2014644	
SCALE-NONE	REV LTR G	SHEET 32 OF 30	

MIL 2084 9-65

LEAD IDENT	WIRE MATL ITEM	LEAD LG	CIRCUIT PT FROM (A) TO (B)	TERM. AREA NO.	JKT STRIP LG	SHLD STRIP LG	LEAD CUT LG	INS STRIP LG	TIN	NOTE ONE, FIG	ACCESSORY ITEMS	REMARKS
D 90R			J2-41					.13	NO		15	A
			P17-H19					.18	NO		18	BRANCH 2
D 90Y			J2-40					.13	NO		15	A
			P17-G19					.18	NO		18	BRANCH 2
D 91	3				1.75	1.50				6B	20	
					1.00	.75				6B	20	
D 91A	9		SHLD D91					.20	NO			
			J4-2					.13	NO		16	
D 91B	9		P17-D27					.18	NO		17	BRANCH 1
			SHLD D91					.20	NO			
D 91Y			J4-3					.13	NO		16	
			P17-D26					.18	NO		17	
D 96	7											
D 96G			J1-11					.13	NO		16	
			P17-F8					.18	NO		18	BRANCH 1
D 96R			J1-10					.13	NO		16	
			P17-G7					.18	NO		18	BRANCH 1
D 96Y			J1-9					.13	NO		16	
			P17-F7					.18	NO		18	BRANCH 1
D 97	2		J3-18					.13	NO		16	B
			P17-A15					.18	NO		18	BRANCH 1
D 98	2		J3-36					.13	NO		16	B
			P17-B15					.18	NO		18	BRANCH 1

SIZE	CODE IDENT NO.		
A	80230	2014644	
SCALE-NONE	REV LTR G	SHEET 33 OF 30	

MIL 2084 9-65

LEAD IDENT	WIRE MATL ITEM	LEAD LG	CIRCUIT PT FROM (A) TO (B)	TERM. AREA NO.	JKT STRIP LG	SHLD STRIP LG	LEAD CUT LG	INS STRIP LG	TIN	NOTE ONE, FIG	ACCESSORY ITEMS	REMARKS
D 99	2		J3-19					.13	NO		16	B
			P17-C15					.18	NO		18	BRANCH 1
D 100	2		J3-62					.13	NO		16	B
			P17-B17					.18	NO		18	BRANCH 1
D 101	2		J3-63					.13	NO		16	B
			P17-C17					.18	NO		18	BRANCH 1
D 102	2		J3-38					.13	NO		16	B
			P17-B18					.18	NO		18	BRANCH 1
D 103	2		J3-84					.13	NO		16	B
			P17-D13					.18	NO		18	BRANCH 1
D 104	2		J3-60					.13	NO		16	B
			P17-D12					.18	NO		18	BRANCH 1
D 105	2		J3-59					.13	NO		16	B
			P17-D11					.18	NO		18	BRANCH 1
D 106	2		J3-41					.13	NO		16	B
			P17-B2					.18	NO		18	BRANCH 1
D 107	2		J3-65					.13	NO		16	B
			P17-B1					.18	NO		18	BRANCH 1
D 108	2		J3-40					.13	NO		16	B
			P17-B3					.18	NO		18	BRANCH 1
D 109	2		J3-42					.13	NO		16	B
			P17-C1					.18	NO		18	BRANCH 1
D 110	2		J3-66					.13	NO		16	B
			P17-D1					.18	NO		18	BRANCH 1

SIZE	CODE IDENT NO.	
A	80230	2014644
SCALE-NONE	REV LTR G	SHEET 34 OF 38

MIL 2084 9-65

LEAD IDENT	WIRE MATL ITEM	LEAD LG	CIRCUIT PT FROM (A) TO (B)	TERM. AREA NO.	JKT STRIP LG	SHLD STRIP LG	LEAD CUT LG	INS STRIP LG	TIN	NOTE ONE, FIG	ACCESSORY ITEMS	REMARKS
D 111	2		J3-21					.13	NO		16	B
			P17-D2					.18	NO		18	BRANCH 1
D 112	2		J3-22					.13	NO		16	B
			P17-C2					.18	NO		18	BRANCH 1
D 113	2		J3-39					.13	NO		16	B
			P17-D3					.18	NO		18	BRANCH 1
D 114	2		J3-64					.13	NO		16	B
			P17-C3					.18	NO		18	BRANCH 1
D 115	2		J3-33					.13	NO		16	B
			P17-A12					.18	NO		18	BRANCH 1
D 116	2		J3-17					.13	NO		16	B
			P17-B12					.18	NO		18	BRANCH 1
D 117	2		J3-57					.13	NO		16	B
			P17-A11					.18	NO		18	BRANCH 1
D 118	2		J3-82					.13	NO		16	B
			P17-B11					.18	NO		18	BRANCH 1
D 119	2		J3-81					.13	NO		16	B
			P17-A14					.18	NO		18	BRANCH 1
D 120	2		J3-80					.13	NO		16	B
			P17-B13					.18	NO		18	BRANCH 1
D 121	2		J3-56					.13	NO		16	B
			P17-A13					.18	NO		18	BRANCH 1
D 122	2		J3-24					.13	NO		16	B
			P17-A9					.18	NO		18	BRANCH 1

SIZE	CODE IDENT NO.	
A	80230	2014644
SCALE-NONE	REV LTR G	SHEET 35 OF 38

MIL 2084 9-65

LEAD IDENT	WIRE MATL ITEM	LEAD LG	CIRCUIT PT FROM (A) TO (B)	TERM. AREA NO.	JKT STRIP LG	SHLD STRIP LG	LEAD CUT LG	INS STRIP LG	TIN	NOTE ONE, FIG	ACCESSORY ITEMS	REMARKS
D 123	2		J3-43					.13	NO		16	B
			P17-C10					.18	NO		18	BRANCH 1
D 124	2		J3-25					.13	NO		16	B
			P17-C9					.18	NO		18	BRANCH 1
D 125	2		J3-23					.13	NO		16	B
			P17-B9					.18	NO		18	BRANCH 1
D 126	2		J3-5					.13	NO		16	B
			P17-D8					.18	NO		18	BRANCH 1
D 127	2		J3-14					.13	NO		16	B
			P17-C8					.18	NO		18	BRANCH 1
D 128	2		J3-4					.13	NO		16	B
			P17-B10					.18	NO		18	BRANCH 1
D 129	2		J3-1					.13	NO		16	B
			P17-A10					.18	NO		18	BRANCH 1
D 130	4				1.75	1.50				6B	20	SEE NOTE 30
					1.00	.75				6B	20	
D 130A	9		SHLD D130					.20	NO			
			E2					.19	NO			
D 130B	9		P17-C11					.18	NO		18	BRANCH 1
			SHLD D130					.20	NO			
D 130R			J3-3					.13	NO		16	
			P17-D10					.18	NO		17	BRANCH 1
D 130Y			J3-11					.13	NO		16	
			P17-D9					.18	NO		17	BRANCH 1

SIZE	CODE IDENT NO.	
A	80230	2014644
SCALE-NONE	REV LTR G	SHEET 36 OF 38

MIL 2084 9-65

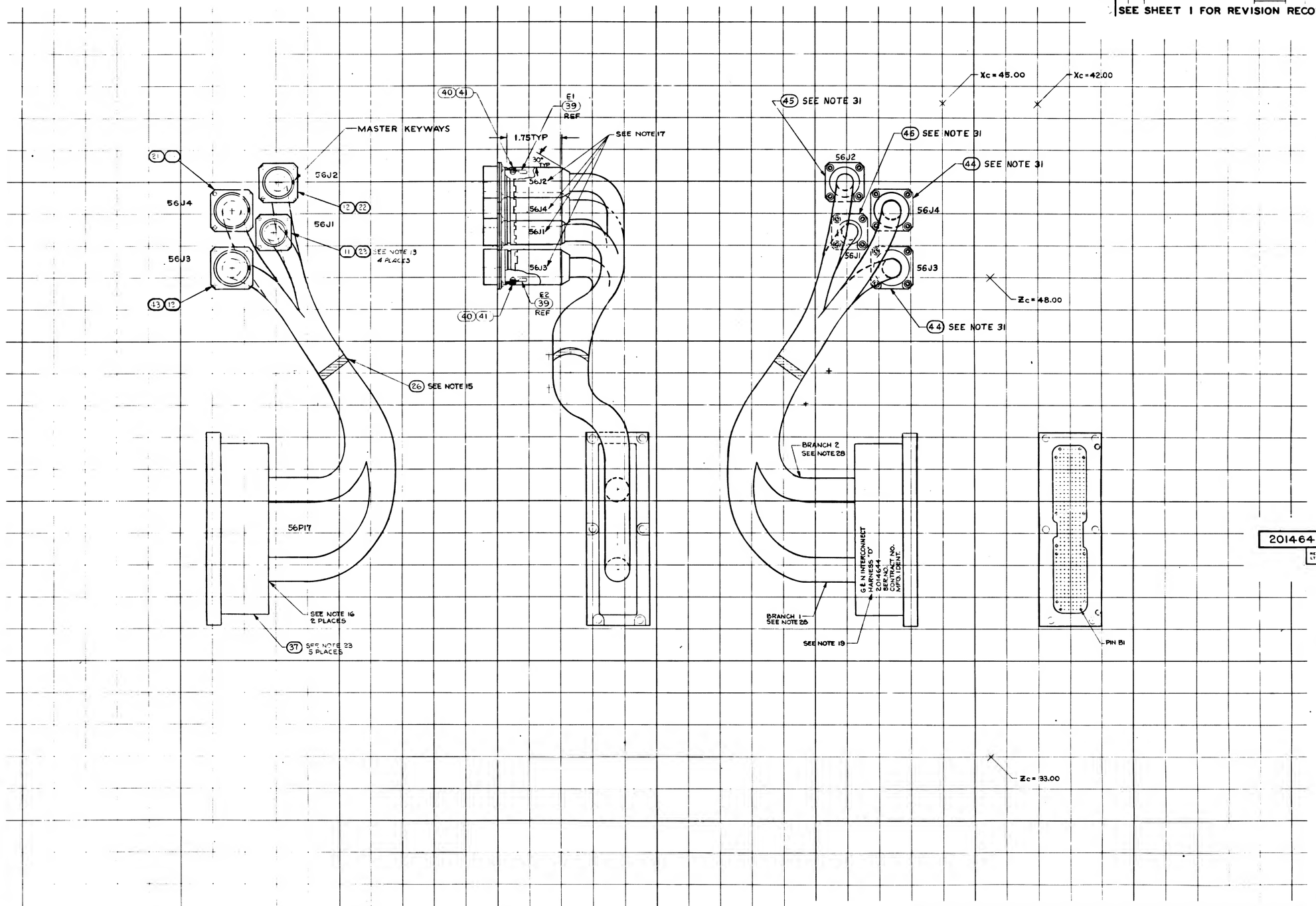
LEAD IDENT	WIRE MATL ITEM	LEAD LG	CIRCUIT PT FROM (A) TO (B)	TERM. AREA NO.	JKT STRIP LG	SHLD STRIP LG	LEAD CUT LG	INS STRIP LG	TIN	NOTE ONE, FIG	ACCESSORY ITEMS	REMARKS
D 131	36		E1					.19	NO		39	A
			P17-H40					.19	NO		17	BRANCH 2
D 132	36		E2					.19	NO		39	B
			P17-C12					.19	NO		17	BRANCH 1

SIZE	CODE IDENT NO.	
A	80230	2014644
SCALE-NONE	REV LTR H	SHEET 37 OF 38

MIL 2084 9-65

REVISIONS					
SYM	ZONE	DESCRIPTION	CHG NO	DATE	APPD

SEE SHEET 1 FOR REVISION RECORD



2014644

REV LTR H

NEXT ASSY	USED ON	UNLESS OTHERWISE SPECIFIED DIMENSIONS ARE IN INCHES CAPACITOR VALUES ARE IN μf RESISTOR VALUES ARE IN OHMS TOLERANCES ON FRACTIONS ± ___ DECIMALS ±.03 ANGLES ± 2° DO NOT SCALE THIS DRAWING MATERIAL	M.I.T. INSTRUMENTATION LAB CAMBRIDGE MASS. DRAWN CHECKED APPROVED APPROVED APPROVED MIT APPROVED MSC DATE	MANNED SPACECRAFT CENTER HOUSTON TEXAS G&N INTERCONNECT HARNESS "D" (C/M SYS II) CODE IDENT NO 80230 SIZE E DRAWING NO 2014644 SCALE 1/1 SHEET 38 OF 30	
APPLICATION					

MX 10989

APPLICATION		REVISIONS			
NEXT ASSY	USED ON	SYM	DESCRIPTION	DATE	APPROVAL
2014567-011	2014567-011	E	REPLACES REV D WITH CHANGE PER TDRR		
		F	ADDED CONFIGURATION & CHANGES PER TDRR 24809	14/12/65	WK
		(M) G	Revised per TDRR 25306	2/4/66	[illegible]
		(M) H	REVISED PER TDRR 28360	5-MAY-66	B. [illegible]
		J	REVISED PER TDRR 28830	23 MAY 66	JK [illegible]

REPLACES REV D WITH CHANGE

REV	G	G	G	G	G	G	J	G	G	G	G	G	G	J	G	G	J	H	J
SHEET	20	21	22	23	24	25	26	27	28	29	30	31	32	33	34	35	36	37	38

REV STATUS OF SHEETS	REV						J	G	J	J	H	G	J	J	G	G	G	G	G	G	G	G	G	G	G
	SHEET						1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16	17	18	19

MIT INSTRUMENTATION LAB CAMBRIDGE MASS

DWG. NO CONTRACT

DRAWN [illegible] DATE

CHECKED [illegible] 3 DEC 65

APPROVAL [illegible] 3 DEC 65 (Rev Dec 30, 65)

APPROVAL [illegible] 10/24/66

MANNED SPACECRAFT CENTER HOUSTON, TEXAS

G & N INTERCONNECT HARNESS "D"

(C/M, BLOCK II)

NASA APPROVAL A. C. METZGER

MIT APPROVAL [illegible] 21 Dec 65

CONTRACT NAS 9-497

CODE IDENT NO.	SIZE		REV
80230	A	2014644	J

SCALE —

SHEET 1 OF 38

NOTE NUMBER	GENERAL NOTES DESCRIPTION
1	SHIELD TERMINATION FIGURES ARE PER ND1002071 FOR FIGURE 6B AND ND1002032 FOR FIGURE 7.
2	INTERPRET DRAWING IN ACCORDANCE WITH STANDARDS PRESCRIBED BY MIL-D-70327.
3	INTERCONNECT LIST FOR THIS HARNESS IS 2014674.
4	PARTIAL CIRCUIT POINTS ARE SHOWN. PREFIX WITH UNIT NUMBER 56 FOR COMPLETE CIRCUIT POINT
5	THE SUFFIX LETTER OF A CONDUCTOR IDENTIFICATION NUMBER IDENTIFIES A SHIELD LEAD, COLOR, OR MARKED LETTER. A - FROM END OF SHIELD B - TO END OF SHIELD G - GREEN K - BLACK L - BLUE N - BROWN R - RED W - WHITE Y - YELLOW
6	ASTERISK DENOTES LOWER CASE LETTER
7	GRID MODULE ON PICTURE SHEET IS 1 INCH TRUE POSITION
8	UNLESS OTHERWISE SPECIFIED FEATURE CENTERLINES ON PICTURE SHEET ARE LOCATED WITHIN + OR - .25. ENDS OF HOOKUP WIRES OR ACCESSORIES ARE LOCATED WITHIN .12.
9	VENDOR ITEM - SEE SOURCE CONTROL OR SPECIFICATION CONTROL DRAWING.
10	CRIMP CONTACTS PER ND1002032.

NOTE NUMBER	GENERAL NOTES DESCRIPTION
11	ALL UNUSED CONTACT CAVITIES SHALL BE FILLED WITH A CONTACT OR CONTACT AND SEALING PLUG AS FOLLOWS CONNECTOR 56J2, USE ITEM NUMBERS 15 AND 19. CONNECTOR 56P17, USE ITEM NUMBER 17. CONNECTOR 56J1,3, AND 4, USE ITEM NUMBERS 16 AND 19.
12	LACE HARNESS PER ND1002032 USING ITEM NUMBER 24.
13	APPLY BONDING MATERIAL PER ND1002187, TYPE I, USING ITEMS 29 AND 30 TO THE THREADED PORTION OF CONNECTOR AND TO THE THREADED PORTION OF THE ADAPTER PRIOR TO ASSEMBLY.
14	ALL SHIELDED TERMINATIONS SHALL BE LOCATED BELOW REFERENCE LINE A. THERE SHALL BE NO EXPOSED CONDUCTORS AT THE SURFACE OF THE POTTING COMPOUND.
15	BEFORE LACING HARNESS, APPLY 2 TURNS OF TAPE TO INDICATE CABLE CLAMP LOCATION.
16	WRAP TAPE AROUND HARNESS IN AREA SHOWN AS REQUIRED TO BUILD UP DIAMETER TO FIT SHELL HOLE.
17	MARK CONNECTOR WITH REFERENCE DESIGNATION AS SHOWN .12 HIGH, BLACK, PER ND1002019, CENTRALIZE.
19	MARK CHARACTERS .12 HIGH, BLACK, PER ND1002019, SERIALIZE PER ND1002023.
20	CONTINUITY TEST PER CONDUCTOR CHART. RESISTANCE SHALL BE LESS THAN 1/2 OHM. TEST PER MIL-STD-202, METHOD 303.

NOTE NUMBER	GENERAL NOTES DESCRIPTION
21	INSULATION RESISTANCE SHALL BE GREATER THAN 100 MEGOHMS WITH 500 VDC APPLIED BETWEEN A. THE ASSEMBLY PINS AND STRUCTURE GROUND, EXCEPT THOSE PINS ELECTRICALLY CONNECTED TO STRUCTURE GROUND. B. EACH PIN AND ALL OTHER PINS NOT ELECTRICALLY CONNECTED, INCLUDING ALL SPARE PINS. TEST PER MIL-STD-202, METHOD 302, EXCEPT ELECTRIFICATION TIME NOT APPLICABLE. SHORT CIRCUIT CURRENT SHALL BE LIMITED TO 15 MA.
22	PRESEAL BACK OF CONNECTOR P17 PRIOR TO ENCAPSULATION PER ND1002187 TYPE III USING ITEMS 29,30,31, AND 32.
23	ENCAPSULATE BACK OF CONNECTORS PER ND1002236 USING ITEMS 28 AND 33.
24	CONDUCTORS LISTED WITH AN A OR B IN THE REMARKS COLUMN ARE TO BE ASSEMBLED AS SHOWN ON THE CONFIGURATION DRAWING.
25	GROUP SHIELDING - THREAD ONE CONTINUOUS LENGTH OF GROUND WIRE, ITEM 36, THROUGH CENTER OF EMI/RFI SHIELDING TAPE, ITEM 34. ALLOW 6 INCHES OF GROUND WIRE TO EXTEND BEYOND ENDS OF SHIELDING TAPE. WRAP CABLE WITH ONE CONTINUOUS LENGTH OF PREPAKED SHIELDING. SUCCESSIVE TURNS SHALL OVERLAP BY APPROXIMATELY 1/2 THE WIDTH OF THE TAPE, WITH A MINIMUM OF RIDGES AND FOLDS.
26	COMPLETELY COVER SHIELD WITH ONE CONTINUOUS WRAP OF INSULATION TAPE, ITEM 25. SUCCESSIVE TURNS SHALL OVERLAP BY APPROXIMATELY 1/2 THE WIDTH OF THE TAPE WITH A MINIMUM OF RIDGES AND FOLDS.
27	ASSEMBLE INSULATION TUBING, ITEM 35, OVER GROUND WIRE AS REQUIRED TO REACH TERMINATION. ASSEMBLE SHRINK SLEEVING AS SHOWN.
28	CONDUCTORS SHALL ENTER CONNECTOR 56P17 THROUGH THE APPROPRIATE BRANCH SPECIFIED IN THE REMARKS COLUMN.

NOTE NUMBER	GENERAL NOTES DESCRIPTION
29	ASSEMBLE A LENGTH OF WIRE BRAID, ITEM 42, OVER CONDUCTOR D130. ALLOW 1.75 INCH OF LEAD TO EXTEND BEYOND BRAID. COVER BRAID WITH TEFLON TAPE, ITEM 25, PER NOTE 26. ALLOW .25 INCH OF BRAID TO EXTEND BEYOND TAPE. FOLD BRAID OVER TAPE AND TERMINATION PER ND1002071 FIGURE 6B.
30	PERFORM WORKMANSHIP VIBRATION A. SINUSOIDAL SWEEP AT 3.5 G RMS. LIMITED TO 0.3 INCH PEAK TO PEAK DISPLACEMENT, FROM 10 TO 2000 CPS AT A RATE OF 4 OCTAVES PER MINUTE. B. VIBRATION ALONG THE X AXIS OF THE SPACE CRAFT. C. MONITOR FOR DISCONTINUITIES OF 10 MICRO SECONDS OR GREATER DURING VIBRATION. D. COMPLETE CONTINUITY AND INSULATION RESISTANCE TESTING MUST BE ACCOMPLISHED AFTER VIBRATION.
31	BOND NOT PLATE ASSEMBLIES TO CONNECTORS J1, J2, J3 AND J4 PER ND1002004, USING ITEMS 47 AND 48.

LEAD TOLERANCE CHART

	LEAD LG	JKT STRIP LG	SHIELD STRIP LG	LEAD CUT LG	INS STRIP LG
UNDER 3 INCHES	+ .12-.00	+.06-.06	+.06-.06	+.06-.06	+.06-.00
3 INCH TO 3 FT	+ .50-.00	+.25-.25	+.25-.25	+.25-.25	
3 FT TO 10 FT	+1.00-.00				
10 FT AND OVER	+2.00-.00				

SEE NOTE

LIST OF MATERIALS

NUMBER	ITEM	QTY	PART NO.	DESCRIPTION
	1	1	2014644- 1	WIRE PER 1010789-006, 22AWG, YEL, 5 FT TOT LG
	2	1	2014644- 2	WIRE PER 1010789-016, 26AWG, YEL, 65 FT TOT LG
	3	1	2014644- 3	WIRE PER 1010789-011, 24AWG, YEL YEL JKT, 5 FT TOT LG
	4	1	2014644- 4	WIRE PER 1010789-008, 22 AWG, YEL, RED, 5 FT TOT LG
	5	1	2014644- 5	WIRE PER 1010789-017, 26 AWG, YEL, RED, 50 FT TOT LG
	6	1	2014644- 6	WIRE PER 1010789-015, 26 AWG, YEL, RED, YEL JKT, 60 FT TOT LG
	7	1	2014644- 7	WIRE PER 1010789-018, 26 AWG, YEL, RED, GRN, 5 FT TOT LG
	8	1	2014644- 8	WIRE PER 1010789-013, 24 AWG, YEL, RED, GRN, YEL JKT, 5 FT TOT LG
	9	1	2014644- 9	WIRE PER 1010789-002, 24 AWG, BLK, 78 FT TOT LG
	10	1	2014644- 10	WIRE PER 1010789-024, 26AWG, BLK, 50 FT TOT LG
9	11	1	1010930-009	CONNECTOR, RECEPTACLE, ELECTRICAL (56J1)
9	12	1	1010930-105	CONNECTOR, RECEPTACLE, ELECTRICAL (56J2)
9	13	1	1010930-002	CONNECTOR, RECEPTACLE, ELECTRICAL (56J3)
9	14	1	1010930-001	CONNECTOR, RECEPTACLE, ELECTRICAL (56J4)
9	15	X	1010770- 1	CONTACT, PIN, SUPPLIED WITH CONNECTOR 1010930

SIZE	CODE IDENT NO.	
A	80230	2014644
SCALE-NONE	REV LTR G	SHEET 6 OF 38

MIL 2084 9-65

SEE NOTE

LIST OF MATERIALS

NUMBER	ITEM	QTY	PART NO.	DESCRIPTION
9	16	X	1010770- 2	CONTACT, SOCKET, SUPPLIED WITH CONNECTOR 1010930
9	17	172	1010955-001	CONTACT, MALE
9	18	132	1010955-002	CONTACT, MALE
9	19	52	1010958-001	PLUG, PROTECTIVE SEALING
9	20	78	1010402- 2	SLEEVE, SOLDER
	21	1	2014670- 4	ADAPTER, CONNECTOR
	22	1	2014670- 12	ADAPTER, CONNECTOR
	23	1	2014670- 7	ADAPTER, CONNECTOR
	24	AR	1012507-004	TAPE, LACING
	25	AR	MIL-T-23594	TAPE, TEFLON, TYPE II, 1 INCH WIDE
	26	AR	MIL-T-23594	TAPE, TEFLON, TYPE II, 1/4 INCH WIDE
	28	AR	1012503	COMPOUND, POTTING, POLYURETHANE
	29	AR	1010679	ADHESIVE ACTIVATOR
	30	AR	1010661	EPOXY RESIN
	31	AR	1006277	SILICA, PULVERIZED, PYROGENIC
	32	AR	1008822	COLORANT, EPOXY BASE
	33	AR	1012504	PRIMER, METAL PARTS
	34	AR	1010989	TAPE, SHIELDING, EMI/RFI, 16 FT TOT LG

SIZE	CODE IDENT NO.	
A	80230	2014644
SCALE-NONE	REV LTR J	SHEET 7 OF 38

MIL 2084 9-65

SEE NOTE

LIST OF MATERIALS

NUMBER	ITEM	QTY	PART NO.	DESCRIPTION
	35	AR	1006776- 19	INSULATION SLEEVING
	36	1	2014644- 11	WIRE PER QQ-W-343, TYPE C, CLASS C, UNCOATED, SILVER PLATED, 22AWG, 30 FT TOT LG
	37	1	2014744-011	CONNECTOR, PLUG, ELECTRICAL (56P17)
	38		MS17182-2	DELETED
	39	2	MS17182-1	TERMINAL LUG
	40	2	MS35333-69	WASHER, LOCK
	41	2	1006783- 93	SCREW, BUTTON HD
	42	1	2014644- 12	WIRE BRAID,QQ-B-575,1/8 DIA.,36AWG,2 FT TOT LG
	43	1	2014670- 11	ADAPTER, CONNECTOR
	44	2	2010725-011	NUT PLATE ASSEMBLY
	45	1	2010725-021	NUT PLATE ASSEMBLY
	46	1	2010725-031	NUT PLATE ASSEMBLY
	47	AR	1010682	EPOXY RESIN
	48	AR	1010683	CURING AGENT, AMINE
	49	4	1010402- 1	SLEEVE, SOLDER

SIZE	CODE IDENT NO.	
A	80230	2014644
SCALE-NONE	REV LTR J	SHEET 8 OF 38

MIL 2084 9-65

LEAD IDENT	WIRE MATL ITEM	LEAD LG	CIRCUIT PT FROM (A) TO (B)	TERM. AREA NO.	JKT STRIP LG	SHLD STRIP LG	LEAD CUT LG	INS STRIP LG	TIN	NOTE ONE, FIG	ACCESSORY ITEMS	REMARKS
D	1	6			1.75	1.50				6B	20	
					1.00	.75				6B	20	
D	1A	9	SHLD D1					.20	NO			
			J4-30					.13	NO		16	
D	1B	9	P17-G31					.18	NO		17	BRANCH 2
			SHLD D1					.20	NO			
D	1R		J4-52					.13	NO		16	
			P17-H31					.18	NO		18	BRANCH 2
D	1Y		J4-51					.13	NO		16	
			P17-K31					.18	NO		18	BRANCH 2
D	2	6			1.75	1.50				6B	20	
					1.00	.75				6B	20	
D	2A	9	SHLD D2					.20	NO			
			J4-31					.13	NO		16	
D	2B	9	P17-G32					.18	NO		17	BRANCH 2
			SHLD D2					.20	NO			
D	2R		J4-54					.13	NO		16	
			P17-K32					.18	NO		18	BRANCH 2
D	2Y		J4-53					.13	NO		16	
			P17-H32					.18	NO		18	BRANCH 2
D	3	6			1.75	1.50				6B	20	
					1.00	.75				6B	20	
D	3A	9	SHLD D3					.20	NO			
			J4-29					.13	NO		16	

SIZE	CODE IDENT NO.	
A	80230	2014644
SCALE-NONE	REV LTR G	SHEET 9 OF 38

MIL 2084 9-65

LEAD IDENT	WIRE MATL ITEM	LEAD LG	CIRCUIT PT FROM (A) TO (B)	TERM. AREA NO.	JKT STRIP LG	SHLD STRIP LG	LEAD CUT LG	INS STRIP LG	TIN	NOTE ONE, FIG	ACCESSORY ITEMS	REMARKS
D	3B 10		P17-G33					.22	NO			BRANCH 2
			SHLD D3					.20	NO			
D	3R		J4-13					.13	NO		16	
			P17-H33					.22	NO			BRANCH 2
D	3Y		J4-14					.13	NO		16	
			P17-K33					.22	NO			BRANCH 2
D	4 6				1.75	1.50				6B	20	
					1.00	.75				6B	20	
D	4A 9		SHLD D4					.20	NO			
			J4-32					.13	NO		16	
D	4B 10		P17-G34					.22	NO			BRANCH 2
			SHLD D4					.20	NO			
D	4R		J4-16					.13	NO		16	
			P17-K34					.22	NO			BRANCH 2
D	4Y		J4-15					.13	NO		16	
			P17-H34					.22	NO			BRANCH 2
D	5 6				1.75	1.50				6B	20	
					1.00	.75				6B	20	
D	5A 9		SHLD D5					.20	NO			
			J4-36					.13	NO		16	
D	5B 9		P17-G29					.18	NO		17	BRANCH 2
			SHLD D5					.20	NO			
D	5R		J4-59					.13	NO		16	
			P17-H29					.18	NO		18	BRANCH 2

SIZE	CODE IDENT NO.		
A	80230	2014644	
SCALE-NONE	REV LTR G	SHEET 10 OF 30	

MIL 2084 9-65

LEAD IDENT	WIRE MATL ITEM	LEAD LG	CIRCUIT PT FROM (A) TO (B)	TERM. AREA NO.	JKT STRIP LG	SHLD STRIP LG	LEAD CUT LG	INS STRIP LG	TIN	NOTE ONE, FIG	ACCESSORY ITEMS	REMARKS
D	5Y		J4-60					.13	NO		16	
			P17-K29					.18	NO		18	BRANCH 2
D	6 6				1.75	1.50				6B	20	
					1.00	.75				6B	20	
D	6A 9		SHLD D6					.20	NO			
			J4-37					.13	NO		16	
D	6B 9		P17-G30					.18	NO		17	BRANCH 2
			SHLD D6					.20	NO			
D	6R		J4-61					.13	NO		16	
			P17-K30					.18	NO		18	BRANCH 2
D	6Y		J4-38					.13	NO		16	
			P17-H30					.18	NO		18	BRANCH 2
D	7 6				1.75	1.50				6B	20	
					1.00	.75				6B	20	
D	7A 9		SHLD D7					.20	NO			
			J4-33					.13	NO		16	
D	7B 10		P17-F27					.22	NO			BRANCH 2
			SHLD D7					.20	NO			
D	7R		J4-56					.13	NO		16	
			P17-F28					.22	NO			BRANCH 2
D	7Y		J4-55					.13	NO		16	
			P17-F29					.22	NO			BRANCH 2
D	8 6				1.75	1.50				6B	20	
					1.00	.75				6B	20	

SIZE	CODE IDENT NO.		
A	80230	2014644	
SCALE-NONE	REV LTR G	SHEET 11 OF 30	

MIL 2084 9-65

LEAD IDENT	WIRE MATL ITEM	LEAD LG	CIRCUIT PT FROM (A) TO (B)	TERM. AREA NO.	JKT STRIP LG	SHLD STRIP LG	LEAD CUT LG	INS STRIP LG	TIN	NOTE ONE, FIG	ACCESSORY ITEMS	REMARKS
D	8A 9		SHLD D8					.20	NO			
			J4-34					.13	NO		16	
D	8B 10		P17-F33					.22	NO			BRANCH 2
			SHLD D8					.20	NO			
D	8R		J4-57					.13	NO		16	
			P17-F31					.22	NO			BRANCH 2
D	8Y		J4-58					.13	NO		16	
			P17-F32					.22	NO			BRANCH 2
D	9 6				1.75	1.50				6B	20	
					1.00	.75				6B	20	
D	9A 9		SHLD D9					.20	NO			
			J4-27					.13	NO		16	
D	9B 9		P17-G27					.18	NO		17	BRANCH 2
			SHLD D9					.20	NO			
D	9R		J4-48					.13	NO		16	
			P17-H27					.18	NO		18	BRANCH 2
D	9Y		J4-47					.13	NO		16	
			P17-K27					.18	NO		18	BRANCH 2
D	10 6				1.75	1.50				6B	20	
					1.00	.75				6B	20	
D	10A 9		SHLD D10					.20	NO			
			J4-28					.13	NO		16	
D	10B 9		P17-G28					.18	NO		17	BRANCH 2
			SHLD D10					.20	NO			

SIZE	CODE IDENT NO.		
A	80230	2014644	
SCALE-NONE	REV LTR G	SHEET 12 OF 30	

MIL 2084 9-65

LEAD IDENT	WIRE MATL ITEM	LEAD LG	CIRCUIT PT FROM (A) TO (B)	TERM. AREA NO.	JKT STRIP LG	SHLD STRIP LG	LEAD CUT LG	INS STRIP LG	TIN	NOTE ONE, FIG	ACCESSORY ITEMS	REMARKS
D	10R		J4-49					.13	NO		16	
			P17-K28					.18	NO		18	BRANCH 2
D	10Y		J4-50					.13	NO		16	
			P17-H28					.18	NO		18	BRANCH 2
D	11 6				1.75	1.50				6B	20	
					1.00	.75				6B	20	
D	11A 9		SHLD D11					.20	NO			
			J4-35					.13	NO		16	
D	11B 10		P17-G25					.22	NO			BRANCH 1
			SHLD D11					.20	NO			
D	11R		J4-17					.13	NO		16	
			P17-H25					.22	NO			BRANCH 1
D	11Y		J4-18					.13	NO		16	
			P17-K25					.22	NO			BRANCH 1
D	12 6				1.75	1.50				6B	20	
					1.00	.75				6B	20	
D	12A 9		SHLD D12					.20	NO			
			J4-20					.13	NO		16	
D	12B 10		P17-G26					.22	NO			BRANCH 1
			SHLD D12					.20	NO			
D	12R		J4-19					.13	NO		16	
			P17-K26					.22	NO			BRANCH 1
D	12Y		J4-8					.13	NO		16	
			P17-H26					.22	NO			BRANCH 1

SIZE	CODE IDENT NO.		
A	80230	2014644	
SCALE-NONE	REV LTR G	SHEET 13 OF 30	

MIL 2084 9-65

LEAD IDENT	WIRE MATL ITEM	LEAD LG	CIRCUIT PT FROM (A) TO (B)	TERM. AREA NO.	JKT STRIP LG	SHLD STRIP LG	LEAD CUT LG	INS STRIP LG	TIN	NOTE ONE, FIG	ACCESSORY ITEMS	REMARKS
D 13	6				1.75	1.50				6B	20	
					1.00	.75				6B	20	
D 13A	9		SHLD D13					.20	NO			
			J4-22					.13	NO		16	
D 13B	9		P17-C25					.18	NO		17	BRANCH 1
			SHLD D13					.20	NO			
D 13R			J4-41					.13	NO		16	
			P17-A25					.18	NO		18	BRANCH 1
D 13Y			J4-42					.13	NO		16	
			P17-B25					.18	NO		18	BRANCH 1
D 14	6				1.75	1.50				6B	20	
					1.00	.75				6B	20	
D 14A	9		SHLD D14					.20	NO			
			J4-24					.13	NO		16	
D 14B	9		P17-C39					.18	NO		17	BRANCH 2
			SHLD D14					.20	NO			
D 14R			J4-43					.13	NO		16	
			P17-B39					.18	NO		18	BRANCH 2
D 14Y			J4-44					.13	NO		16	
			P17-A39					.18	NO		18	BRANCH 2
D 15	6				1.75	1.50				6B	20	
					1.00	.75				6B	20	
D 15A	9		SHLD D15					.20	NO			
			J4-25					.13	NO		16	

SIZE	CODE IDENT NO.	
A	80230	2014644
SCALE-NONE	REV LTR G	SHEET 14 OF 30

MIL 2084 9-65

LEAD IDENT	WIRE MATL ITEM	LEAD LG	CIRCUIT PT FROM (A) TO (B)	TERM. AREA NO.	JKT STRIP LG	SHLD STRIP LG	LEAD CUT LG	INS STRIP LG	TIN	NOTE ONE, FIG	ACCESSORY ITEMS	REMARKS
D 15B	9		P17-D40					.18	NO		17	BRANCH 2
			SHLD D15					.20	NO			
D 15R			J4-45					.13	NO		16	
			P17-D41					.18	NO		18	BRANCH 2
D 15Y			J4-46					.13	NO		16	
			P17-C41					.18	NO		18	BRANCH 2
D 16	6				1.75	1.50				6B	20	
					1.00	.75				6B	20	
D 16A	9		SHLD D16					.20	NO			
			J4-21					.13	NO		16	
D 16B	9		P17-C24					.18	NO		17	BRANCH 1
			SHLD D16					.20	NO			
D 16R			J4-39					.13	NO		16	
			P17-B24					.18	NO		18	BRANCH 1
D 16Y			J4-40					.13	NO		16	
			P17-D24					.18	NO		18	BRANCH 1
D 17	6				1.75	1.50				6B	20	
					1.00	.75				6B	20	
D 17A	9		SHLD D17					.20	NO			
			J4-10					.13	NO		16	
D 17B	9		P17-C38					.18	NO		17	BRANCH 2
			SHLD D17					.20	NO			
D 17R			J4-9					.13	NO		16	
			P17-A38					.18	NO		18	BRANCH 2

SIZE	CODE IDENT NO.	
A	80230	2014644
SCALE-NONE	REV LTR G	SHEET 15 OF 30

MIL 2084 9-65

LEAD IDENT	WIRE MATL ITEM	LEAD LG	CIRCUIT PT FROM (A) TO (B)	TERM. AREA NO.	JKT STRIP LG	SHLD STRIP LG	LEAD CUT LG	INS STRIP LG	TIN	NOTE ONE, FIG	ACCESSORY ITEMS	REMARKS
D 17Y			J4-23					.13	NO		16	
			P17-B38					.18	NO		18	BRANCH 2
D 18	6				1.75	1.50				6B	20	
					1.00	.75				6B	20	
D 18A	9		SHLD D18					.20	NO			
			J4-11					.13	NO		16	
D 18B	9		P17-C40					.18	NO		17	BRANCH 2
			SHLD D18					.20	NO			
D 18R			J4-26					.13	NO		16	
			P17-B41					.18	NO		18	BRANCH 2
D 18Y			J4-12					.13	NO		16	
			P17-B40					.18	NO		18	BRANCH 2
D 19	6				1.75	1.50				6B	20	
					1.00	.75				6B	20	
D 19A	9		SHLD D19					.20	NO			
			J4-1					.13	NO		16	
D 19B	9		P17-C26					.18	NO		17	BRANCH 1
			SHLD D19					.20	NO			
D 19R			J4-6					.13	NO		16	
			P17-B26					.18	NO		18	BRANCH 1
D 19Y			J4-7					.13	NO		16	
			P17-A26					.18	NO		18	BRANCH 1
D 20	1		J4-5					.13	NO		16	
			P17-D25					.18	NO		17	BRANCH 1

SIZE	CODE IDENT NO.	
A	80230	2014644
SCALE-NONE	REV LTR G	SHEET 16 OF 30

MIL 2084 9-65

LEAD IDENT	WIRE MATL ITEM	LEAD LG	CIRCUIT PT FROM (A) TO (B)	TERM. AREA NO.	JKT STRIP LG	SHLD STRIP LG	LEAD CUT LG	INS STRIP LG	TIN	NOTE ONE, FIG	ACCESSORY ITEMS	REMARKS
D 21	1		J4-4					.13	NO		16	
			P17-F25					.18	NO		17	BRANCH 1
D 22	6				1.75	1.50				6B	20	
					1.00	.75				6B	20	
D 22A	9		SHLD D22					.20	NO			
			J1-17					.13	NO		16	
D 22B	9		P17-F3					.18	NO		17	BRANCH 1
			SHLD D22					.20	NO			
D 22R			J1-34					.13	NO		16	
			P17-F1					.18	NO		18	BRANCH 1
D 22Y			J1-33					.13	NO		16	
			P17-F2					.18	NO		18	BRANCH 1
D 23	6				1.75	1.50				6B	20	
					1.00	.75				6B	20	
D 23A	9		SHLD D23					.20	NO			
			J1-18					.13	NO		16	
D 23B	9		P17-K3					.18	NO		17	BRANCH 1
			SHLD D23					.20	NO			
D 23R			J1-35					.13	NO		16	
			P17-H4					.18	NO		18	BRANCH 1
D 23Y			J1-36					.13	NO		16	
			P17-K4					.18	NO		18	BRANCH 1
D 24	6				1.75	1.50				6B	20	
					1.00	.75				6B	20	

SIZE	CODE IDENT NO.	
A	80230	2014644
SCALE-NONE	REV LTR G	SHEET 17 OF 30

MIL 2084 9-65

LEAD IDENT	WIRE MATL ITEM	LEAD LG	CIRCUIT PT FROM (A) TO (B)	TERM. AREA NO.	JKT STRIP LG	SHLD STRIP LG	LEAD CUT LG	INS STRIP LG	TIN	NOTE ONE, FIG	ACCESSORY ITEMS	REMARKS
D 24A	9		SHLD D24					.20	NO			
			J1-14					.13	NO		16	
D 24B	9		P17-G3					.18	NO		17	BRANCH 1
			SHLD D24					.20	NO			
D 24R			J1-30					.13	NO		16	
			P17-G2					.18	NO		18	BRANCH 1
D 24Y			J1-29					.13	NO		16	
			P17-G1					.18	NO		18	BRANCH 1
D 25	6				1.75	1.50				6B	20	
					1.00	.75				6B	20	
D 25A	9		SHLD D25					.20	NO			
			J1-15					.13	NO		16	
D 25B	9		P17-H3					.18	NO		17	BRANCH 1
			SHLD D25					.20	NO			
D 25R			J1-31					.13	NO		16	
			P17-H1					.18	NO		18	BRANCH 1
D 25Y			J1-32					.13	NO		16	
			P17-H2					.18	NO		18	BRANCH 1
D 26	6				1.75	1.50				6B	20	
					1.00	.75				6B	20	
D 26A	9		SHLD D26					.20	NO			
			J1-20					.13	NO		16	
D 26B	9		P17-G6					.18	NO		17	BRANCH 1
			SHLD D26					.20	NO			

SIZE	CODE IDENT NO.	
A	80230	2014644
SCALE-NONE	REV LTR G	SHEET 18 OF 38

MIL 2084 9-65

LEAD IDENT	WIRE MATL ITEM	LEAD LG	CIRCUIT PT FROM (A) TO (B)	TERM. AREA NO.	JKT STRIP LG	SHLD STRIP LG	LEAD CUT LG	INS STRIP LG	TIN	NOTE ONE, FIG	ACCESSORY ITEMS	REMARKS
D 26R			J1-19					.13	NO		16	
			P17-H6					.18	NO		18	BRANCH 1
D 26Y			J1-37					.13	NO		16	
			P17-K6					.18	NO		18	BRANCH 1
D 27	6				1.75	1.50				6B	20	
					1.00	.75				6B	20	
D 27A	9		SHLD D27					.20	NO			
			J1-21					.13	NO		16	
D 27B	9		P17-G5					.18	NO		17	BRANCH 1
			SHLD D27					.20	NO			
D 27R			J1-38					.13	NO		16	
			P17-K5					.18	NO		18	BRANCH 1
D 27Y			J1-39					.13	NO		16	
			P17-H5					.18	NO		18	BRANCH 1
D 28	6				1.75	1.50				6B	20	
					1.00	.75				6B	20	
D 28A	9		SHLD D28					.20	NO			
			J1-13					.13	NO		16	
D 28B	10		P17-C4					.22	NO			BRANCH 1
			SHLD D28					.20	NO			
D 28R			J1-28					.13	NO		16	
			P17-A4					.22	NO			BRANCH 1
D 28Y			J1-27					.13	NO		16	
			P17-B4					.22	NO			BRANCH 1

SIZE	CODE IDENT NO.	
A	80230	2014644
SCALE-NONE	REV LTR G	SHEET 19 OF 38

MIL 2084 9-65

LEAD IDENT	WIRE MATL ITEM	LEAD LG	CIRCUIT PT FROM (A) TO (B)	TERM. AREA NO.	JKT STRIP LG	SHLD STRIP LG	LEAD CUT LG	INS STRIP LG	TIN	NOTE ONE, FIG	ACCESSORY ITEMS	REMARKS
D 29	6				1.75	1.50				6B	20	
					1.00	.75				6B	20	
D 29A	9		SHLD D29					.20	NO			
			J1-16					.13	NO		16	
D 29B	10		P17-C5					.22	NO			BRANCH 1
			SHLD D29					.20	NO			
D 29R			J1-6					.13	NO		16	
			P17-B5					.22	NO			BRANCH 1
D 29Y			J1-5					.13	NO		16	
			P17-A5					.22	NO			BRANCH 1
D 30	6				1.75	1.50				6B	20	
					1.00	.75				6B	20	
D 30A	9		SHLD D30					.20	NO			
			J1-1					.13	NO		16	
D 30B	10		P17-C6					.22	NO			BRANCH 1
			SHLD D30					.20	NO			
D 30R			J1-4					.13	NO		16	
			P17-A6					.22	NO			BRANCH 1
D 30Y			J1-3					.13	NO		16	
			P17-B6					.22	NO			BRANCH 1
D 31	7											
D 31G			J1-26					.13	NO		16	
			P17-D4					.18	NO		18	BRANCH 1

SIZE	CODE IDENT NO.	
A	80230	2014644
SCALE-NONE	REV LTR G	SHEET 20 OF 38

MIL 2084 9-65

LEAD IDENT	WIRE MATL ITEM	LEAD LG	CIRCUIT PT FROM (A) TO (B)	TERM. AREA NO.	JKT STRIP LG	SHLD STRIP LG	LEAD CUT LG	INS STRIP LG	TIN	NOTE ONE, FIG	ACCESSORY ITEMS	REMARKS
D 31R			J1-43					.13	NO		16	
			P17-D6					.18	NO		18	BRANCH 1
D 31Y			J1-44					.13	NO		16	
			P17-D5					.18	NO		18	BRANCH 1
D 32	7											
D 32G			J1-8					.13	NO		16	
			P17-F4					.18	NO		18	BRANCH 1
D 32R			J1-7					.13	NO		16	
			P17-F5					.18	NO		18	BRANCH 1
D 32Y			J1-2					.13	NO		16	
			P17-F6					.18	NO		18	BRANCH 1
D 35	2		J1-25					.13	NO		16	
			P17-A3					.18	NO		18	BRANCH 1
D 36	4											
D 36R			J1-40					.13	NO		16	
			P17-K8					.18	NO		17	BRANCH 1
D 36Y			J1-23					.13	NO		16	
			P17-H8					.18	NO		17	BRANCH 1
D 37	4											
D 37R			J1-41					.13	NO		16	
			P17-K9					.18	NO		17	BRANCH 1

SIZE	CODE IDENT NO.	
A	80230	2014644
SCALE-NONE	REV LTR G	SHEET 21 OF 38

MIL 2084 9-65

LEAD IDENT	WIRE MATL ITEM	LEAD LG	CIRCUIT PT FROM (A) TO (B)	TERM. AREA NO.	JKT STRIP LG	SHLD STRIP LG	LEAD CUT LG	INS STRIP LG	TIN	NOTE ONE, FIG	ACCESSORY ITEMS	REMARKS
D 37Y			J1-42					.13	NO		16	
			P17-K10					.18	NO		17	BRANCH 1
D 40	2		J3-8					.13	NO		16	8
			P17-C16					.18	NO		18	BRANCH 1
D 42	2		J3-7					.13	NO		16	8
			P17-B16					.18	NO		18	BRANCH 1
D 50	2		J3-2					.13	NO		16	8
			P17-C18					.18	NO		18	BRANCH 1
D 55	6				1.75	1.50				6B	20	
					1.00	.75				6B	20	
D 55A	9		SHLD D55					.20	NO			
			J3-30					.13	NO		16	
D 55B	10		P17-C4					.22	NO		17	BRANCH 1
			SHLD D55					.20	NO			
D 55R			J3-31					.13	NO		16	
			P17-A4					.22	NO		17	BRANCH 1
D 55Y			J3-15					.13	NO		16	
			P17-B4					.22	NO		17	BRANCH 1
D 56	6				1.75	1.50				6B	20	
					1.00	.75				6B	20	
D 56A	9		SHLD D56					.20	NO			
			J3-52					.13	NO		16	
D 56B	10		P17-C5					.22	NO		17	BRANCH 1
			SHLD D56					.20	NO			

SIZE	CODE IDENT NO.	
A	80230	2014644
SCALE-NONE	REV LTR G	SHEET 22 OF 38

MIL 2084 9-65

LEAD IDENT	WIRE MATL ITEM	LEAD LG	CIRCUIT PT FROM (A) TO (B)	TERM. AREA NO.	JKT STRIP LG	SHLD STRIP LG	LEAD CUT LG	INS STRIP LG	TIN	NOTE ONE, FIG	ACCESSORY ITEMS	REMARKS
D 56R			J3-77					.13	NO		16	
			P17-B5					.22	NO		17	BRANCH 1
D 56Y			J3-53					.13	NO		16	
			P17-A5					.22	NO		17	BRANCH 1
D 57	6				1.75	1.50				6B	20	
					1.00	.75				6B	20	
D 57A	9		SHLD D57					.20	NO			
			J3-51					.13	NO		16	
D 57B	10		P17-C6					.22	NO		17	BRANCH 1
			SHLD D57					.20	NO			
D 57R			J3-75					.13	NO		16	
			P17-A6					.22	NO		17	BRANCH 1
D 57Y			J3-76					.13	NO		16	
			P17-B6					.22	NO		17	BRANCH 1
D 58	6				1.75	1.50				6B	20	
					1.00	.75				6B	20	
D 58A	9		SHLD D58					.20	NO			
			J3-46					.13	NO		16	
D 58B	10		P17-G33					.22	NO		17	BRANCH 2
			SHLD D58					.20	NO			
D 58R			J3-71					.13	NO		16	
			P17-H33					.22	NO		17	BRANCH 2
D 58Y			J3-70					.13	NO		16	
			P17-K33					.22	NO		17	BRANCH 2

SIZE	CODE IDENT NO.	
A	80230	2014644
SCALE-NONE	REV LTR G	SHEET 23 OF 38

MIL 2084 9-65

LEAD IDENT	WIRE MATL ITEM	LEAD LG	CIRCUIT PT FROM (A) TO (B)	TERM. AREA NO.	JKT STRIP LG	SHLD STRIP LG	LEAD CUT LG	INS STRIP LG	TIN	NOTE ONE, FIG	ACCESSORY ITEMS	REMARKS
D 59	6				1.75	1.50				6B	20	
					1.00	.75				6B	20	
D 59A	9		SHLD D59					.20	NO			
			J3-69					.13	NO		16	
D 59B	10		P17-G34					.22	NO		17	BRANCH 2
			SHLD D59					.20	NO			
D 59R			J3-45					.13	NO		16	
			P17-K34					.22	NO		17	BRANCH 2
D 59Y			J3-44					.13	NO		16	
			P17-H34					.22	NO		17	BRANCH 2
D 60	6				1.75	1.50				6B	20	
					1.00	.75				6B	20	
D 60A	9		SHLD D60					.20	NO			
			J3-28					.13	NO		16	
D 60B	10		P17-F27					.22	NO		17	BRANCH 2
			SHLD D60					.20	NO			
D 60R			J3-13					.13	NO		16	
			P17-F28					.22	NO		17	BRANCH 2
D 60Y			J3-29					.13	NO		16	
			P17-F29					.22	NO		17	BRANCH 2
D 61	6				1.75	1.50				6B	20	
					1.00	.75				6B	20	
D 61A	9		SHLD D61					.20	NO			
			J3-74					.13	NO		16	

SIZE	CODE IDENT NO.	
A	80230	2014644
SCALE-NONE	REV LTR G	SHEET 24 OF 38

MIL 2084 9-65

LEAD IDENT	WIRE MATL ITEM	LEAD LG	CIRCUIT PT FROM (A) TO (B)	TERM. AREA NO.	JKT STRIP LG	SHLD STRIP LG	LEAD CUT LG	INS STRIP LG	TIN	NOTE ONE, FIG	ACCESSORY ITEMS	REMARKS
D 61B	10		P17-F33					.22	NO		17	BRANCH 2
			SHLD D61					.20	NO			
D 61R			J3-49					.13	NO		16	
			P17-F31					.22	NO		17	BRANCH 2
D 61Y			J3-50					.13	NO		16	
			P17-F32					.22	NO		17	BRANCH 2
D 62	6				1.75	1.50				6B	20	
					1.00	.75				6B	20	
D 62A	9		SHLD D62					.20	NO			
			J3-27					.13	NO		16	
D 62B	10		P17-G25					.22	NO		17	BRANCH 1
			SHLD D62					.20	NO			
D 62R			J3-26					.13	NO		16	
			P17-H25					.22	NO		17	BRANCH 1
D 62Y			J3-47					.13	NO		16	
			P17-K25					.22	NO		17	BRANCH 1
D 63	6				1.75	1.50				6B	20	
					1.00	.75				6B	20	
D 63A	9		SHLD D63					.20	NO			
			J3-48					.13	NO		16	
D 63B	10		P17-G26					.22	NO		17	BRANCH 1
			SHLD D63					.20	NO			
D 63R			J3-72					.13	NO		16	
			P17-K26					.22	NO		17	BRANCH 1

SIZE	CODE IDENT NO.	
A	80230	2014644
SCALE-NONE	REV LTR G	SHEET 25 OF 38

MIL 2084 9-65

LEAD IDENT	WIRE MATL ITEM	LEAD LG	CIRCUIT PT FROM (A) TO (B)	TERM.JKT AREA NO.	STRIP LG	SHLD STRIP LG	LEAD CUT LG	INS STRIP LG	TIN	NOTE ONE, FIG	ACCESSORY ITEMS	REMARKS
D 63Y			J3-73					.13	NO		16	
			P17-H26					.22	NO		17	BRANCH 1
D 64	4											
D 64R			J3-67					.13	NO		16	
			P17-H9					.18	NO		17	BRANCH 1
D 64Y			J3-68					.13	NO		16	
			P17-H10					.18	NO		17	BRANCH 1
D 65	8				1.75	1.50				6B	20	
					1.00	.75				6B	20	
D 65A	9		SHLD D65					.20	NO			
			J2-44					.13	NO		15	
D 65B	9		P17-C21					.16	NO		17	BRANCH 1
			SHLD D65					.20	NO			
D 65G			J2-25					.13	NO		15	
			P17-B21					.18	NO		17	BRANCH 1
D 65R			J2-46					.13	NO		15	
			P17-C20					.18	NO		17	BRANCH 1
D 65Y			J2-45					.13	NO		15	
			P17-B20					.18	NO		17	BRANCH 1
D 66	3				1.75	1.50				6B	49	
					1.00	.75				6B	49	
D 66A	9		SHLD D66					.20	NO			
			J2-26					.13	NO		15	

SIZE	CODE IDENT NO.	
A	80230	2014644
SCALE-NONE	REV LTR J	SHEET 26 OF 38

MIL 2084 9-65

LEAD IDENT	WIRE MATL ITEM	LEAD LG	CIRCUIT PT FROM (A) TO (B)	TERM.JKT AREA NO.	STRIP LG	SHLD STRIP LG	LEAD CUT LG	INS STRIP LG	TIN	NOTE ONE, FIG	ACCESSORY ITEMS	REMARKS
D 66B	9		P17-B19					.18	NO		17	BRANCH 1
			SHLD D66					.20	NO			
D 66Y			J2-47					.13	NO		15	
			P17-C19					.18	NO		17	
D 67	5											A
D 67R			J2-55					.13	NO		15	A
			P17-A31					.18	NO		18	BRANCH 2
D 67Y			J2-56					.13	NO		15	A
			P17-B31					.18	NO		18	BRANCH 2
D 68	5											A
D 68R			J2-54					.13	NO		15	A
			P17-A32					.18	NO		18	BRANCH 2
D 68Y			J2-32					.13	NO		15	A
			P17-B32					.18	NO		18	BRANCH 2
D 69	5											A
D 69R			J2-17					.13	NO		15	A
			P17-A33					.18	NO		18	BRANCH 2
D 69Y			J2-33					.13	NO		15	A
			P17-B33					.18	NO		18	BRANCH 2
D 70	5											A

SIZE	CODE IDENT NO.	
A	80230	2014644
SCALE-NONE	REV LTR G	SHEET 27 OF 38

MIL 2084 9-65

LEAD IDENT	WIRE MATL ITEM	LEAD LG	CIRCUIT PT FROM (A) TO (B)	TERM.JKT AREA NO.	STRIP LG	SHLD STRIP LG	LEAD CUT LG	INS STRIP LG	TIN	NOTE ONE, FIG	ACCESSORY ITEMS	REMARKS
D 70R			J2-16					.13	NO		15	A
			P17-A34					.18	NO		18	BRANCH 2
D 70Y			J2-5					.13	NO		15	A
			P17-B34					.18	NO		18	BRANCH 2
D 71	5											A
D 71R			J2-57					.13	NO		15	A
			P17-A35					.18	NO		18	BRANCH 2
D 71Y			J2-34					.13	NO		15	A
			P17-B35					.18	NO		18	BRANCH 2
D 72	5											A
D 72R			J2-18					.13	NO		15	A
			P17-A36					.18	NO		18	BRANCH 2
D 72Y			J2-35					.13	NO		15	A
			P17-B36					.18	NO		18	BRANCH 2
D 73	5											A
D 73R			J2-15					.13	NO		15	A
			P17-A28					.18	NO		18	BRANCH 2
D 73Y			J2-30					.13	NO		15	A
			P17-B28					.18	NO		18	BRANCH 2
D 74	5											A

SIZE	CODE IDENT NO.	
A	80230	2014644
SCALE-NONE	REV LTR G	SHEET 28 OF 38

MIL 2084 9-65

LEAD IDENT	WIRE MATL ITEM	LEAD LG	CIRCUIT PT FROM (A) TO (B)	TERM.JKT AREA NO.	STRIP LG	SHLD STRIP LG	LEAD CUT LG	INS STRIP LG	TIN	NOTE ONE, FIG	ACCESSORY ITEMS	REMARKS
D 74R			J2-52					.13	NO		15	A
			P17-A29					.18	NO		18	BRANCH 2
D 74Y			J2-53					.13	NO		15	A
			P17-B29					.18	NO		18	BRANCH 2
D 75	5											A
D 75R			J2-50					.13	NO		15	A
			P17-F37					.18	NO		18	BRANCH 2
D 75Y			J2-51					.13	NO		15	A
			P17-F36					.18	NO		18	BRANCH 2
D 76	5											A
D 76R			J2-13					.13	NO		15	A
			P17-K37					.18	NO		18	BRANCH 2
D 76Y			J2-29					.13	NO		15	A
			P17-H37					.18	NO		18	BRANCH 2
D 77	5											A
D 77R			J2-12					.13	NO		15	A
			P17-H36					.18	NO		18	BRANCH 2
D 77Y			J2-27					.13	NO		15	A
			P17-K36					.18	NO		18	BRANCH 2
D 78	5											A

SIZE	CODE IDENT NO.	
A	80230	2014644
SCALE-NONE	REV LTR G	SHEET 29 OF 38

MIL 2084 9-65

LEAD IDENT	WIRE MATL ITEM	LEAD LG	CIRCUIT PT FROM (A) TO (B)	TERM. AREA NO.	JKT STRIP LG	SHLD STRIP LG	LEAD CUT LG	INS STRIP LG	TIN	NOTE ONE, FIG	ACCESSORY ITEMS	REMARKS
D 78R			J2-48					.13	NO		15	A
			P17-G41					.18	NO		18	BRANCH 2
D 78Y			J2-49					.13	NO		15	A
			P17-H41					.18	NO		18	BRANCH 2
D 79	5											A
D 79R			J2-1					.13	NO		15	A
			P17-F40					.18	NO		18	BRANCH 2
D 79Y			J2-4					.13	NO		15	A
			P17-F39					.18	NO		18	BRANCH 2
D 80	5											A
D 80R			J2-11					.13	NO		15	A
			P17-H38					.18	NO		18	BRANCH 2
D 80Y			J2-24					.13	NO		15	A
			P17-K38					.18	NO		18	BRANCH 2
D 81	5											A
D 81R			J2-10					.13	NO		15	A
			P17-K39					.18	NO		18	BRANCH 2
D 81Y			J2-2					.13	NO		15	A
			P17-H39					.18	NO		18	BRANCH 2
D 82	5											A

SIZE	CODE IDENT NO.		
A	80230	2014644	
SCALE-NONE	REV LTR G	SHEET 30 OF 38	

MIL 2084 9-65

LEAD IDENT	WIRE MATL ITEM	LEAD LG	CIRCUIT PT FROM (A) TO (B)	TERM. AREA NO.	JKT STRIP LG	SHLD STRIP LG	LEAD CUT LG	INS STRIP LG	TIN	NOTE ONE, FIG	ACCESSORY ITEMS	REMARKS
D 82R			J2-59					.13	NO		15	A
			P17-H15					.18	NO		18	BRANCH 2
D 82Y			J2-58					.13	NO		15	A
			P17-K15					.18	NO		18	BRANCH 2
D 83	5											A
D 83R			J2-7					.13	NO		15	A
			P17-K14					.18	NO		18	BRANCH 2
D 83Y			J2-6					.13	NO		15	A
			P17-H14					.18	NO		18	BRANCH 2
D 84	5											A
D 84R			J2-36					.13	NO		15	A
			P17-H17					.18	NO		18	BRANCH 2
D 84Y			J2-60					.13	NO		15	A
			P17-K17					.18	NO		18	BRANCH 2
D 85	5											A
D 85R			J2-8					.13	NO		15	A
			P17-K16					.18	NO		18	BRANCH 2
D 85Y			J2-19					.13	NO		15	A
			P17-H16					.18	NO		18	BRANCH 2
D 86	5											A

SIZE	CODE IDENT NO.		
A	80230	2014644	
SCALE-NONE	REV LTR G	SHEET 31 OF 38	

MIL 2084 9-65

LEAD IDENT	WIRE MATL ITEM	LEAD LG	CIRCUIT PT FROM (A) TO (B)	TERM. AREA NO.	JKT STRIP LG	SHLD STRIP LG	LEAD CUT LG	INS STRIP LG	TIN	NOTE ONE, FIG	ACCESSORY ITEMS	REMARKS
D 86R			J2-61					.13	NO		15	A
			P17-H13					.18	NO		18	BRANCH 2
D 86Y			J2-38					.13	NO		15	A
			P17-K13					.18	NO		18	BRANCH 2
D 87	5											A
D 87R			J2-39					.13	NO		15	A
			P17-K12					.18	NO		18	BRANCH 2
D 87Y			J2-20					.13	NO		15	A
			P17-H12					.18	NO		18	BRANCH 2
D 88	5											A
D 88R			J2-43					.13	NO		15	A
			P17-H21					.18	NO		18	BRANCH 2
D 88Y			J2-42					.13	NO		15	A
			P17-G21					.18	NO		18	BRANCH 2
D 89	5											A
D 89R			J2-22					.13	NO		15	A
			P17-G20					.18	NO		18	BRANCH 2
D 89Y			J2-9					.13	NO		15	A
			P17-H20					.18	NO		18	BRANCH 2
D 90	5											A

SIZE	CODE IDENT NO.		
A	80230	2014644	
SCALE-NONE	REV LTR G	SHEET 32 OF 38	

MIL 2084 9-65

LEAD IDENT	WIRE MATL ITEM	LEAD LG	CIRCUIT PT FROM (A) TO (B)	TERM. AREA NO.	JKT STRIP LG	SHLD STRIP LG	LEAD CUT LG	INS STRIP LG	TIN	NOTE ONE, FIG	ACCESSORY ITEMS	REMARKS
D 90R			J2-41					.13	NO		15	A
			P17-H19					.18	NO		18	BRANCH 2
D 90Y			J2-40					.13	NO		15	A
			P17-G19					.18	NO		18	BRANCH 2
D 91	3				1.75	1.50				6B	49	
					1.00	.75				6B	49	
D 91A	9		SHLD D91					.20	NO			
			J4-2					.13	NO		16	
D 91B	9		P17-D27					.18	NO		17	BRANCH 1
			SHLD D91					.20	NO			
D 91Y			J4-3					.13	NO		16	
			P17-D26					.18	NO		17	
D 96	7											
D 96G			J1-11					.13	NO		16	
			P17-F8					.18	NO		18	BRANCH 1
D 96R			J1-10					.13	NO		16	
			P17-G7					.18	NO		18	BRANCH 1
D 96Y			J1-9					.13	NO		16	
			P17-F7					.18	NO		18	BRANCH 1
D 97	2		J3-18					.13	NO		16	B
			P17-A15					.18	NO		18	BRANCH 1
D 98	2		J3-36					.13	NO		16	B
			P17-B15					.18	NO		18	BRANCH 1

SIZE	CODE IDENT NO.		
A	80230	2014644	
SCALE-NONE	REV LTR J	SHEET 33 OF 38	

MIL 2084 9-65

WIRING HARNESS D 2014644 G

LEAD IDENT	WIRE MATL ITEM	LEAD LG	CIRCUIT PT FROM (A) TO (B)	TERM. AREA NO.	JKT STRIP LG	SHLD STRIP LG	LEAD CUT LG	INS STRIP LG	TIN	NOTE ONE, FIG	ACCESSORY ITEMS	REMARKS
D 99	2		J3-19 P17-C15					.13 .18	NU NO		16 18	B BRANCH 1
D 100	2		J3-62 P17-B17					.13 .18	NO NO		16 18	B BRANCH 1
D 101	2		J3-63 P17-C17					.13 .18	NO NO		16 18	B BRANCH 1
D 102	2		J3-38 P17-B18					.13 .18	NO NO		16 18	B BRANCH 1
D 103	2		J3-84 P17-D13					.13 .18	NO NO		16 18	B BRANCH 1
D 104	2		J3-60 P17-D12					.13 .18	NO NO		16 18	B BRANCH 1
D 105	2		J3-59 P17-D11					.13 .18	NO NO		16 18	B BRANCH 1
D 106	2		J3-41 P17-B2					.13 .18	NO NO		16 18	B BRANCH 1
D 107	2		J3-65 P17-B1					.13 .18	NO NO		16 18	B BRANCH 1
D 108	2		J3-40 P17-B3					.13 .18	NO NO		16 18	B BRANCH 1
D 109	2		J3-42 P17-C1					.13 .18	NO NO		16 18	B BRANCH 1
D 110	2		J3-66 P17-D1					.13 .18	NO NO		16 18	B BRANCH 1

SIZE	CODE IDENT NO.	
A	80230	2014644
SCALE-NONE	REV LTR G	SHEET 34 OF 38

MIL 2084 9-65

WIRING HARNESS D 2014644 G

LEAD IDENT	WIRE MATL ITEM	LEAD LG	CIRCUIT PT FROM (A) TO (B)	TERM. AREA NO.	JKT STRIP LG	SHLD STRIP LG	LEAD CUT LG	INS STRIP LG	TIN	NOTE ONE, FIG	ACCESSORY ITEMS	REMARKS
D 111	2		J3-21 P17-D2					.13 .18	NO NO		16 18	B BRANCH 1
D 112	2		J3-22 P17-C2					.13 .18	NO NO		16 18	B BRANCH 1
D 113	2		J3-39 P17-D3					.13 .18	NO NO		16 18	B BRANCH 1
D 114	2		J3-64 P17-C3					.13 .18	NO NO		16 18	B BRANCH 1
D 115	2		J3-33 P17-A12					.13 .18	NO NO		16 18	B BRANCH 1
D 116	2		J3-17 P17-B12					.13 .18	NO NO		16 18	B BRANCH 1
D 117	2		J3-57 P17-A11					.13 .18	NO NO		16 18	B BRANCH 1
D 118	2		J3-82 P17-B11					.13 .18	NO NO		16 18	B BRANCH 1
D 119	2		J3-81 P17-A14					.13 .18	NO NO		16 18	B BRANCH 1
D 120	2		J3-80 P17-B13					.13 .18	NO NO		16 18	B BRANCH 1
D 121	2		J3-56 P17-A13					.13 .15	NO NO		16 18	B BRANCH 1
D 122	2		J3-24 P17-A9					.13 .18	NO NO		16 18	B BRANCH 1

SIZE	CODE IDENT NO.	
A	80230	2014644
SCALE-NONE	REV LTR G	SHEET 35 OF 38

MIL 2084 9-65

WIRING HARNESS D 2014644 J

LEAD IDENT	WIRE MATL ITEM	LEAD LG	CIRCUIT PT FROM (A) TO (B)	TERM. AREA NO.	JKT STRIP LG	SHLD STRIP LG	LEAD CUT LG	INS STRIP LG	TIN	NOTE ONE, FIG	ACCESSORY ITEMS	REMARKS
D 123	2		J3-43 P17-C10					.13 .18	NO NO		16 18	B BRANCH 1
D 124	2		J3-25 P17-C9					.13 .18	NO NO		16 18	B BRANCH 1
D 125	2		J3-23 P17-B9					.13 .18	NO NO		16 18	B BRANCH 1
D 126	2		J3-5 P17-D8					.13 .18	NO NO		16 18	B BRANCH 1
D 127	2		J3-14 P17-C8					.13 .18	NO NO		16 18	B BRANCH 1
D 128	2		J3-4 P17-B10					.13 .18	NO NO		16 18	B BRANCH 1
D 129	2		J3-1 P17-A10					.13 .18	NO NO		16 18	B BRANCH 1
D 130	4				1.75 1.00	1.50 .75				68 68	20 20	SEE NOTE 30
D 130A	9		SHLD D130 E2					.20 .19	NO NO			
D 130B	9		P17-C11 SHLD D130					.18 .20	NO NO		17	BRANCH 1
D 130R			J3-3 P17-D10					.13 .18	NO NO		16 17	BRANCH 1
D 130Y			J3-11 P17-D9					.13 .18	NO NO		16 17	BRANCH 1

SIZE	CODE IDENT NO.	
A	80230	2014644
SCALE-NONE	REV LTR J	SHEET 36 OF 38

MIL 2084 9-65

WIRING HARNESS D 2014644 H

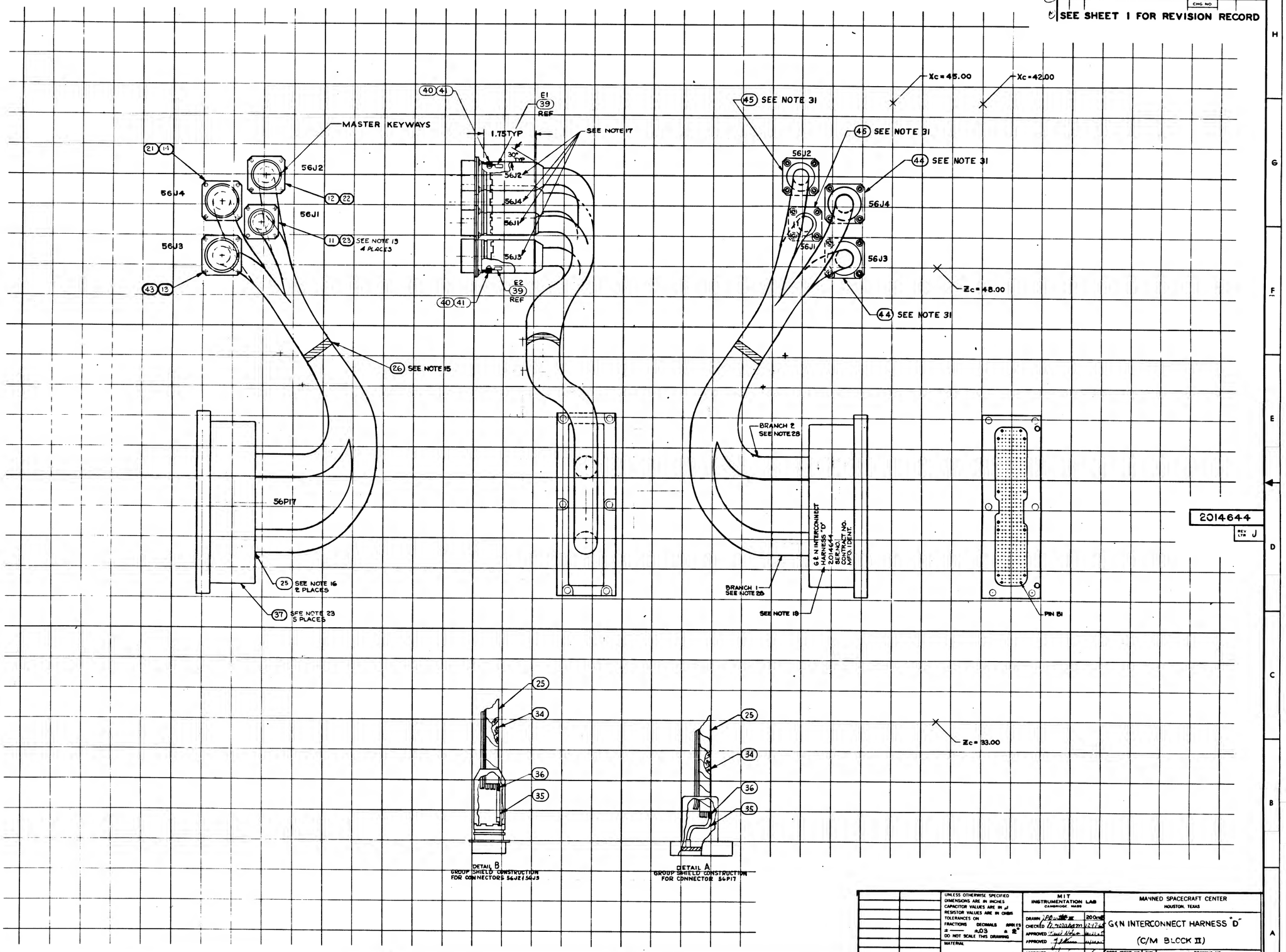
LEAD IDENT	WIRE MATL ITEM	LEAD LG	CIRCUIT PT FROM (A) TO (B)	TERM. AREA NO.	JKT STRIP LG	SHLD STRIP LG	LEAD CUT LG	INS STRIP LG	TIN	NOTE ONE, FIG	ACCESSORY ITEMS	REMARKS
D 131	36		E1 P17-H40					.19 .19	NO NO		39 17	A BRANCH 2
D 132	36		E2 P17-C12					.19 .19	NO NO		39 17	B BRANCH 1

SIZE	CODE IDENT NO.	
A	80230	2014644
SCALE-NONE	REV LTR H	SHEET 37 OF 38

MIL 2084 9-65

REVISIONS					
SYM	ZONE	DESCRIPTION	CHG NO	DATE	APPD

SEE SHEET 1 FOR REVISION RECORD



2014644

REV LTR J

NEXT ASSY	USED ON		
APPLICATION			

UNLESS OTHERWISE SPECIFIED DIMENSIONS ARE IN INCHES
CAPACITOR VALUES ARE IN μf
RESISTOR VALUES ARE IN OHMS
TOLERANCES ON
FRACTIONS ± — DECIMALS ±.03 ANGLES ± 2°
DO NOT SCALE THIS DRAWING
MATERIAL

MIT INSTRUMENTATION LAB CAMBRIDGE MASS

DRAWN 20 Oct
CHECKED 12-17-68
APPROVED
APPROVED
APPROVED MIT
APPROVED MSC
DATE

MANNED SPACECRAFT CENTER HOUSTON, TEXAS

G&N INTERCONNECT HARNESS "D"

(C/M BLOCK II)

CODE IDENT NO. 80230 | SIZE E | DRAWING NO. 2014644

SCALE 1/1 | SHEET 38 OF 38

MX 09891

2014645

NOTES:

1. INTERPRET DRAWING IN ACCORDANE WITH STANDARDS PRESCRIBED BY MIL-D-70327.
2. VENDOR ITEM-SEE SPECIFICATION CONTROL DRAWING.
3. SELECT AS REQUIRED.
4. DRAWING FOR REFERENCE ONLY

REVISIONS

SYM	ZONE	DESCRIPTION	CHG NO.	DATE	APPD.
C		INITIAL CLASS A RELEASE TDRR NO. 22050			

	ITEM NO	NO REQD	PART NO	DESCRIPTION
		1	-012	-002 15
		1	-011	-005 5
SEE NOTE 3		1	-010	-013 10
		1	-009	-018 5
SEE NOTES 2		1	-008	-015 35
		1	-007	-012 5
		1	-006	-017 15
		1	-005	-003 20
		1	-004	-008 5
		1	-003	-016 5
		1	-002	-001 1
		1	2014645-001	WIRE PER 1010789-006 5 FT TOT LG
		45	1010955-2	CONTACT, MALE
		4		CLAMP, PSA CONNECTOR 5052-H32-AL PER QQ-A-250/8
		2		COVER, PSA CONNECTOR 5052-H32-AL PER QQ-A-250/8, 6" LG x 3" WIDE x 1/32" THK
		1		CONNECTOR, PSA (P26) 6061-T6-AL PER QQ-A-250/11, 4" LG x 2" WIDE x 1/2" THK
SEE NOTE 4		X	2014675	INTERCONNECT LIST

	ITEM NO.	NO. REQD	PART OR IDENTIFYING NUMBER	NOMENCLATURE OR DESCRIPTION
		14	1010490-118	SLEEVE, INSULATION (HEAT SHRINKABLE)
		22	1010490-114	SLEEVE, INSULATION (HEAT SHRINKABLE)
		8	MS21209-C0415	INSERT, SCREW THREAD SELF LOCKING
		2	6008007	SCREW, CAPTIVE
		1		CLAMP, CONNECTOR
		AR	1010989	TAPE, SHIELDING, EMI/RFI
		1	1010981-30 THRU 1010981-1	GROMMET
SEE NOTES 2		2	1010400-1	CLAMP, CABLE
SEE NOTE 2		4	1010490-112	INSULATION, SLEEVING, ELECT
SEE NOTE 2		28	1010490-110	
SEE NOTES 2 & 3		AR	1012507-4 / 1012507-2	TAPE, LACING
SEE NOTE 2		AR	1010679	ADHESIVE ACTIVATOR
SEE NOTE 2		AR	1012503	COMPOUND, POTTING, POLYURETHANE
		AR	MIL-T-23594	TAPE, TEFLON
SEE NOTE 2		14	1010402-2	SLEEVE, SOLDER
SEE NOTE 2				
		1		ADAPTER, POTTING MOLD
SEE NOTE 2		AR	1010661	EPOXY RESIN
		24	1010958-1	PLUG, PROTECTIVE SEALING
		90	1010956-1	INSULATOR, MALE
		45	1010955-1	CONTACT, MALE
SEE NOTE 2		85	1010770-2	CONTACT, SOCKET
		1	1010929-004	CONNECTOR, PLUG (P24)

LIST OF PARTS AND MATERIALS

NEXT ASSY	USED ON
2014567-011	2014567-011

APPLICATION

UNLESS OTHERWISE SPECIFIED
DIMENSIONS ARE IN INCHES
TOLERANCES ON
FRACTIONS + — DECIMALS + — ANGLES + —
DO NOT SCALE THIS DRAWING
MATERIAL —
CONTRACT NAS 9-497

MIT INSTRUMENTATION LAB
CAMBRIDGE, MASS.
DWG. NO. CONTRACT
DRAWN E. LITZOW 26 MAY 65 DATE
CHECKED FESLER 28 MAY 65
APPROVAL R C Watson 8-24-65
APPROVAL DEA 8-16-65
NASA APPROVAL 8/31/65
MIT APPROVAL 8/31/65

MANNED SPACECRAFT CENTER
HOUSTON, TEXAS

G&N INTERCONNECT HARNESS "E"

CODE IDENT NO. 80230 | SIZE C | 2014645

SCALE — | SHEET 1 OF 1

MIL 1077C-P

APPLICATION		REVISIONS			
NEXT ASSY	USED ON	SYM	DESCRIPTION	DATE	APPROVAL
2014562-011	2014567-011	E	REPLACES REV D WITH CHANGE PER TDRR	24-NOV-65	J.A.C
		F	ADD CONFIGURATION AND CHANGES PER TDRR 24810		

| REV | | |

SEE NOTE

LIST OF MATERIALS

NUMBER	ITEM	QTY	PART NO.	DESCRIPTION
	1	1	2014645-001	WIRE PER 1010789-006, 22 AWG, YEL, 5 FT TOT LG
	2	1	2014645-002	WIRE PER 1010789-001, 24 AWG, YEL, 5 FT TOT LG
	3	1	2014645-003	WIRE PER 1010789-016, 26 AWG, YEL, 5 FT TOT LG
	4	1	2014645-004	WIRE PER 1010789-003, 24 AWG, YEL, RED, 15 FT TOT LG
	6	1	2014645-005	WIRE PER 1010789-018, 26 AWG, YEL, RED, GRN, 20 FT TOTAL LENGTH
	7	1	2014645-006	WIRE PER 1010789-005, 24 AWG, YEL, RED, GRN, BRN, 5 FT TOT LG
	8	1	2014645-007	WIRE PER 1010789-015, 26 AWG, YEL, RED, YEL JKT, 40 FT TOT LG
	9	1	2014645-008	WIRE PER 1010789-013, 24 AWG, YEL, RED, GRN, YEL JKT, 10 FT TOT LG
	10	1	2014645-009	WIRE PER 1010789-002, 24 AWG, BLK, 15 FT TOT LG
	11	1	2014645-010	WIRE PER 1010789-012, 24 AWG, YEL, RED, YEL JKT 5 FT TOT LG
	12	1	2014745-011	CONNECTOR, PLUG, ELECTRICAL (P26)
9	13	1	1010929-004	CONNECTOR, PLUG, ELECTRICAL (P24)
9	14	~~85~~ X	1010770- 2	CONTACT, SOCKET, SUPPLIED WITH CONNECTOR 1010929
9	15	71	1010955- 1	CONTACT, MALE
9	16	41	1010955- 2	CONTACT, MALE

SIZE	CODE IDENT NO.		
A	80230	2014645	
SCALE-NONE	REV LTR EF	SHEET 5 OF 16	

MIL 2084 9-65

SEE NOTE

LIST OF MATERIALS

NUMBER	ITEM	QTY	PART NO.	DESCRIPTION
9	18	25	1010958- 1	PLUG, PROTECTIVE, SEALING
9	19	19	1010402- 2	SLEEVE, SOLDER
9	20	17	1012534- 36	INSULATION, SLEEVING (HEAT SHRINKABLE)
	21	AR	1006277	SILICA, PULVERIZED, PYROGENIC
	22	AR	1008822	COLORANT, EPOXY BASE
	23	AR	1012504	PRIMER, METAL PARTS
	24	AR	1012503	COMPOUND, POTTING, POLYURETHANE
	25	AR	1010679	ADHESIVE, ACTIVATOR
	26	AR	1010661	EPOXY RESIN
	27	1	2014670- 4	ADAPTER, CONNECTOR
9	28	AR	1012507- 4	TAPE, LACING
	29	AR	MIL-T-23594	TAPE, TEFLON, TYPE II, 1 INCH WIDE
	30	AR	MIL-T-23594	TAPE, TEFLON, TYPE II, 1/4 INCH WIDE
	31	1	2014645-011	WIRE PER 1010789-029, 26 AWG, BLK, 1 FT TOT LG.

SIZE	CODE IDENT NO.		
A	80230	2014645	
SCALE-NONE	REV LTR EF	SHEET 6 OF 16	

MIL 2084 9-65

LEAD IDENT	WIRE MATL ITEM	LEAD LG	CIRCUIT PT FROM (A) TO (B)	TERM. AREA NO.	JKT STRIP LG	SHLD STRIP LG	LEAD CUT LG	INS STRIP LG	TIN	NOTE ONE, FIG	ACCESSORY ITEMS	REMARKS
E	1	8			1.75 1.00	1.50 .75				7 6B	20 19	
E	1B	10	P26-G13 SHLD E1					.18 .20	NO NO		15	
E	1R		P24-21 P26-G14					.13 .18	NO NO		14 16	
E	1Y		P24-39 P26-G15					.13 .18	NO NO		14 16	
E	2	8			1.75 1.00	1.50 .75				7 6B	20 19	
E	2B	10	P26-F13 SHLD E2					.18 .20	NO NO		15	
E	2R		P24-65 P26-F14					.13 .18	NO NO		14 16	
E	2Y		P24-40 P26-F15					.13 .18	NO NO		14 16	
E	3	8			1.75 1.00	1.50 .75				7 6B	20 19	
E	3B	10	P26-C2 SHLD E3					.18 .20	NO NO		15	
E	3R		P24-64 P26-B2					.13 .18	NO NO		14 16	
E	3Y		P24-63 P26-B1					.13 .18	NO NO		14 16	

SIZE	CODE IDENT NO.		
A	80230	2014645	
SCALE-NONE	REV LTR E	SHEET 7 OF 16	

MIL 2084 9-65

LEAD IDENT	WIRE MATL ITEM	LEAD LG	CIRCUIT PT FROM (A) TO (B)	TERM. AREA NO.	JKT STRIP LG	SHLD STRIP LG	LEAD CUT LG	INS STRIP LG	TIN	NOTE ONE, FIG	ACCESSORY ITEMS	REMARKS
E	4	8			1.75 1.00	1.50 .75				7 6B	20 19	
E	4B	10	P26-C3 SHLD E4					.18 .20	NO NO		15	
E	4R		P24-62 P26-A3					.13 .18	NO NO		14 16	
E	4Y		P24-38 P26-B3					.13 .18	NO NO		14 16	
E	5	8			1.75 1.00	1.50 .75				7 6B	20 19	
E	5B	10	P26-G4 SHLD E5					.18 .20	NO NO		15	
E	5R		P24-75 P26-G6					.13 .18	NO NO		14 16	
E	5Y		P24-76 P26-G5					.13 .18	NO NO		14 16	
E	6	8			1.75 1.00	1.50 .75				7 6B	20 19	
E	6B	10	P26-F3 SHLD E6					.18 .20	NO NO		15	
E	6R		P24-52 P26-F2					.13 .18	NO NO		14 16	
E	6Y		P24-77 P26-F1					.13 .18	NO NO		14 16	

SIZE	CODE IDENT NO.		
A	80230	2014645	
SCALE-NONE	REV LTR E	SHEET 8 OF 16	

MIL 2084 9-65

WIRING HARNESS E 2014645 E

LEAD IDENT	WIRE MATL ITEM	LEAD LG	CIRCUIT PT FROM (A) TO (B)	TERM. AREA NO.	JKT STRIP LG	SHLD STRIP LG	LEAD CUT LG	INS STRIP LG	TIN	NOTE ONE, FIG	ACCESSORY ITEMS	REMARKS
E	7	8			1.75 1.00	1.50 .75				7 6B	20 19	
E	7B	10	P26-H3 SHLD E7					.18 .20	NO NO		15	
E	7R		P24-51 P26-H1					.13 .18	NO NO		14 16	
E	7Y		P24-30 P26-H2					.13 .18	NO NO		14 16	
E	8	8			1.75 1.00	1.50 .75				7 6B	20 19	
E	8B	10	P26-G3 SHLD E8					.18 .20	NO NO		15	
E	8R		P24-78 P26-G1					.13 .18	NO NO		14 16	
E	8Y		P24-53 P26-G2					.13 .18	NO NO		14 16	
E	9	11			1.75 1.00	1.50 .75				7 6B	20 19	
E	9B	10	P26-D3 SHLD E9					.18 .20	NO NO		15	
E	9R		P24-74 P26-D1					.13 .18	NO NO		14 15	
E	9Y		P24-50 P26-D2					.13 .18	NO NO		14 15	

SIZE	CODE IDENT NO.		
A	80230	2014645	
SCALE-NONE	REV LTR E	SHEET 9 OF 16	

MIL 2084 9-65

WIRING HARNESS E 2014645 ~~E~~F

LEAD IDENT	WIRE MATL ITEM	LEAD LG	CIRCUIT PT FROM (A) TO (B)	TERM. AREA NO.	JKT STRIP LG	SHLD STRIP LG	LEAD CUT LG	INS STRIP LG	TIN	NOTE ONE, FIG	ACCESSORY ITEMS	REMARKS
E	10	8			1.75 1.00	1.50 .75				7 6B	20 19	
E	10B	10	P26-C5 SHLD E10					.18 .20	NO NO		15	
E	10R		P24-71 P26-A5					.13 .18	NO NO		14 16	
E	10Y		P24-47 P26-B5					.13 .18	NO NO		14 16	
E	11	4										
E	11R		P24-44 P26-B14					.13 .18	NO NO		14 15	
E	11Y		P24-24 P26-C14					.13 .18	NO NO		14 15	
E	13	8			1.75 1.00	1.50 .75				7 6B	20 19	
E	13B	31	P26-D6 SHLD E13					.18 .20	NO NO		15	
E	13R		P24-70 P26-D5					.13 .18	NO NO		14 16	
E	13Y		P24-46 P26-D4					.13 .18	NO NO		14 16	
E	14	8			1.75 1.00	1.50 .75				7 6B	20 19	

SIZE	CODE IDENT NO.		
A	80230	2014645	
SCALE-NONE	REV LTR ~~E~~F	SHEET 10 OF 16	

MIL 2084 9-65

WIRING HAPNESS E 2014645 ~~E~~F

LEAD IDENT	WIRE MATL ITEM	LEAD LG	CIRCUIT PT FROM (A) TO (B)	TERM. AREA NO.	JKT STRIP LG	SHLD STRIP LG	LEAD CUT LG	INS STRIP LG	TIN	NOTE ONE, FIG	ACCESSORY ITEMS	REMARKS
E	14B	10	P26-C4 SHLD E14					.18 .20	NO NO		15	
E	14R		P24-48 P26-A4					.13 .18	NO NO		14 16	
E	14Y		P24-72 P26-B4					.13 .18	NO NO		14 16	
E	15	7										
E	15G		P24-80 P26-F9					.13 .18	NO NO		14 15	
E	15N		P24-79 P26-D10					.13 .18	NO NO		14 15	
E	15R		P24-54 P26-F10					.13 .18	NO NO		14 15	
E	15Y		P24-55 P26-D9					.13 .18	NO NO		14 15	
E	16	8			1.75 1.00	1.50 .75				7 6B	20 19	
E	16B	10	P26-C10 SHLD E16					.18 .20	NO NO		15	
E	16R		P24-32 P26-B10					.13 .18	NO NO		14 16	
E	16Y		P24-33 P26-A10					.13 .18	NO NO		14 16	

SIZE	CODE IDENT NO.		
A	80230	2014645	
SCALE-NONE	REV LTR ~~E~~F	SHEET 11 OF 16	

MIL 2084 9-65

WIRING HARNESS E 2014645 E

LEAD IDENT	WIRE MATL ITEM	LEAD LG	CIRCUIT PT FROM (A) TO (B)	TERM. AREA NO.	JKT STRIP LG	SHLD STRIP LG	LEAD CUT LG	INS STRIP LG	TIN	NOTE ONE, FIG	ACCESSORY ITEMS	REMARKS
E	17	8			1.75 1.00	1.50 .75				7 6B	20 19	
E	17B	10	P26-C9 SHLD E17					.18 .20	NO NO		15	
E	17R		P24-81 P26-A9					.13 .18	NO NO		14 16	
E	17Y		P24-56 P26-B9					.13 .18	NO NO		14 16	
E	18	4										
E	18R		P24-85 P26-K12					.13 .18	NO NO		14 15	
E	18Y		P24-60 P26-H12					.13 .18	NO NO		14 15	
E	19	4										
E	19R		P24-59 P26-H13					.13 .18	NO NO		14 15	
E	19Y		P24-84 P26-K13					.13 .18	NO NO		14 15	
E	20	2	P24-82 P26-C13					.13 .18	NO NO		14 15	
E	21	9			1.75 1.00	1.50 .75				7 6B	20 19	

SIZE	CODE IDENT NO.		
A	80230	2014645	
SCALE-NONE	REV LTR E	SHEET 12 OF 16	

MIL 2084 9-65

WIRING HARNESS E 2014645 EF

LEAD IDENT	WIRE MATL ITEM	LEAD LG	CIRCUIT PT FROM (A) TO (B)	TERM. AREA NO.	JKT STRIP LG	SHLD STRIP LG	LEAD CUT LG	INS STRIP LG	TIN	NOTE ONE, FIG	ACCESSORY ITEMS	REMARKS
E 21B	31		P26-D6 SHLD E21					.18 .20	NO NO		[redacted]	
E 21G			P24-13 P26-A6					.13 .18	NO NO		14 15	
E 21R			P24-12 P26-C6					.13 .18	NO NO		14 15	
E 21Y			P24-4 P26-B6					.13 .18	NO NO		14 15	
E 22	9				1.75 1.00	1.50 .75						
E 22B	10		P26-D8 SHLD E22					.18 .20	NO NO		15	
E 22G			P24-3 P26-B8					.13 .18	NO NO		14 15	
E 22R			P24-10 P26-C8					.13 .18	NO NO		14 15	
E 22Y			P24-2 P26-A8					.13 .18	NO NO		14 15	
E 23	9				1.75 1.00	1.50 .75						
E 23B	10		P26-D7 SHLD E23					.18 .20	NO NO		15	
E 23G			P24-7 P26-A7					.13 .18	NO NO		14 15	

SIZE	CODE IDENT NO.	
A	80230	2014645

SCALE-NONE | REV LTR EF | SHEET 13 OF 16

MIL 2084 9-65

WIRING HARNESS E 2014645 E

LEAD IDENT	WIRE MATL ITEM	LEAD LG	CIRCUIT PT FROM (A) TO (B)	TERM. AREA NO.	JKT STRIP LG	SHLD STRIP LG	LEAD CUT LG	INS STRIP LG	TIN	NOTE ONE, FIG	ACCESSORY ITEMS	REMARKS
E 23R			P24-8 P26-C7					.13 .18	NO NO		14 15	
E 23Y			P24-19 P26-B7					.13 .18	NO NO		14 15	
E 24	6											
E 24G			P24-35 P26-B13					.13 .18	NO NO		14 16	
E 24R			P24-34 P26-A13					.13 .18	NO NO		14 16	
E 24Y			P24-58 P26-A12					.13 .18	NO NO		14 16	
E 25	4											
E 25R			P24-43 P26-K6					.13 .18	NO NO		14 15	
E 25Y			P24-23 P26-K7					.13 .18	NO NO		14 15	
E 26	4											
E 26R			P24-68 P26-K10					.13 .18	NO NO		14 15	
E 26Y			P24-67 P26-K11					.13 .18	NO NO		14 15	

SIZE	CODE IDENT NO.	
A	80230	2014645

SCALE-NONE | REV LTR E | SHEET 14 OF 16

MIL 2084 9-65

WIRING HARNESS E 2014645 E

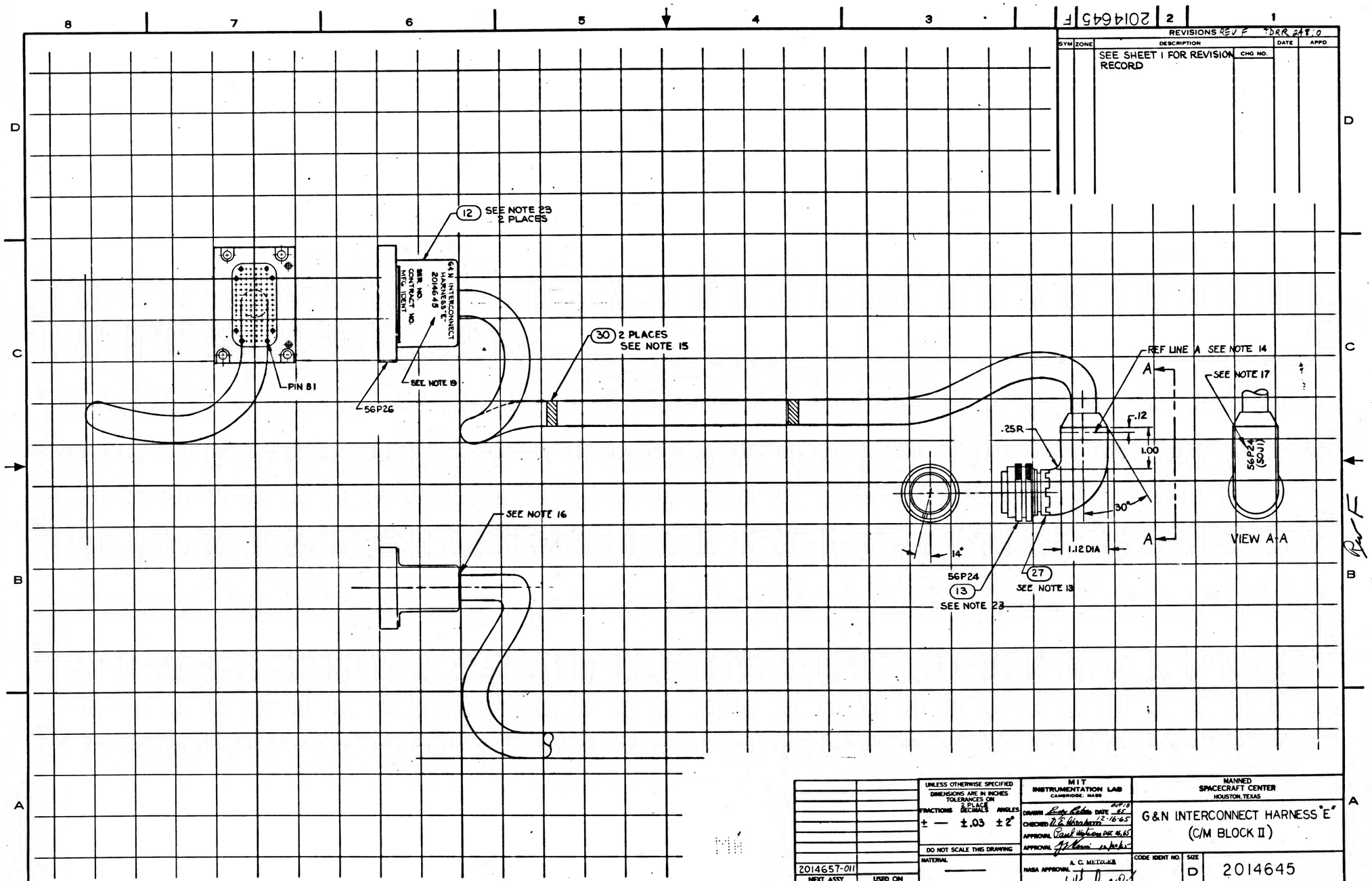
LEAD IDENT	WIRE MATL ITEM	LEAD LG	CIRCUIT PT FROM (A) TO (B)	TERM. AREA NO.	JKT STRIP LG	SHLD STRIP LG	LEAD CUT LG	INS STRIP LG	TIN	NOTE ONE, FIG	ACCESSORY ITEMS	REMARKS
E 28	1		P24-20 P26-D15					.13 .18	NO NO		14 15	
E 29	3		P24-1 P26-K3					.13 .18	NO NO		14 15	
E 34	8				1.75 1.00	1.50 .75				6B 6B	19 19	
E 34A	10		SHLD E34 P24-42					.20 .13	NO NO		 14	
E 34B	10		P26-D14 SHLD E34					.18 .20	NO NO		15	
E 34R			P24-41 P26-B15					.13 .18	NO NO		14 16	
E 34Y			P24-66 P26-C15					.13 .18	NO NO		14 16	

SIZE	CODE IDENT NO.	
A	80230	2014645

SCALE-NONE | REV LTR E | SHEET 15 OF 16

MIL 2084 9-65

REVISIONS REV F *DRR 248.0				
SYM	ZONE	DESCRIPTION	CHG NO.	DATE	APPD
		SEE SHEET 1 FOR REVISION RECORD			



2014657-011		UNLESS OTHERWISE SPECIFIED DIMENSIONS ARE IN INCHES TOLERANCES ON 2 PLACE FRACTIONS ± — DECIMALS ±.03 ANGLES ±2°	MIT INSTRUMENTATION LAB CAMBRIDGE, MASS	MANNED SPACECRAFT CENTER HOUSTON, TEXAS
NEXT ASSY	USED ON	DO NOT SCALE THIS DRAWING	DRAWN DATE 12-16-65	G&N INTERCONNECT HARNESS "E" (C/M BLOCK II)
APPLICATION		MATERIAL —	CHECKED	
		CONTRACT	APPROVAL	CODE IDENT NO. / SIZE D / 2014645
			APPROVAL	
			NASA APPROVAL A. C. METZLER	SCALE 1:1 / SHEET 16 OF 16
			MIT APPROVAL	

NOTE NUMBER	GENERAL NOTES DESCRIPTION
1	SHIELD TERMINATION FIGURES ARE PER ND1002071 FOR FIGURE 6B AND ND 1002032 FOR FIGURE 7.
2	INTERPRET DRAWING IN ACCORDANCE WITH STANDARDS PRESCRIBED BY MIL-D-70327.
3	INTERCONNECT LIST FOR THIS HARNESS IS 2014675.
4	PARTIAL CIRCUIT POINTS ARE SHOWN. PREFIX WITH UNIT NUMBER 56 FOR COMPLETE CIRCUIT POINT
5	THE SUFFIX LETTER OF A CONDUCTOR IDENTIFICATION NUMBER IDENTIFIES A SHIELD LEAD, COLOR, OR MARKED LETTER. A - FROM END OF SHIELD B - TO END OF SHIELD G - GREEN K - BLACK L - BLUE N - BROWN R - RED W - WHITE Y - YELLOW
6	ASTERISK DENOTES LOWER CASE LETTER
7	GRID MODULE ON PICTURE SHEET IS 1 INCH TRUE POSITION
8	UNLESS OTHERWISE SPECIFIED FEATURE CENTERLINES ON PICTURE SHEET ARE LOCATED WITHIN + OR - .25. ENDS OF HOOKUP WIRES OR ACCESSORIES ARE LOCATED WITHIN .12.
9	VENDOR ITEM - SEE SOURCE CONTROL OR SPECIFICATION CONTROL DRAWING.
10	CRIMP CONTACTS PER ND1002032.

SIZE	CODE IDENT NO.	
A	80230	2014645
SCALE-NONE	REV LTR E	SHEET 2 OF 16

MIL 2084 9-65

NOTE NUMBER	GENERAL NOTES DESCRIPTION
11	ALL UNUSED ~~CONTACT CAVITIES~~ CONTACT CAVITIES SHALL BE FILLED WITH A CONTACT OR CONTACT AND SEALING PLUG AS FOLLOWS CONNECTOR 56P24, USE ITEM NUMBERS 14 AND 18. CONNECTOR 56P26, USE ITEM NUMBER 15.
12	LACE HARNESS PER ND1002032 USING ITEM NUMBER 28.
13	A SMALL QUANTITY OF POTTING COMPOUND MUST BE PUT BETWEEN THE THREADED PORTION OF CONNECTOR AND SILICONE RUBBER GROMMET TO SEAL AND BOND RING TO CONNECTOR PRIOR TO POTTING.
14	ALL SHIELDED TERMINATIONS SHALL BE LOCATED BELOW REFERENCE LINE A. THERE SHALL BE NO EXPOSED CONDUCTORS AT THE SURFACE OF THE POTTING COMPOUND.
15	BEFORE LACING HARNESS, APPLY 2 TURNS OF TAPE, ITEM 30, TO INDICATE CABLE CLAMP LOCATION.
16	WRAP TAPE AROUND HARNESS IN AREA SHOWN AS REQUIRED TO BUILD UP DIAMETER TO FIT ~~CABLE CLAMP.~~ SHELL HOLE.
17	MARK CONNECTOR WITH REFERENCE DESIGNATION AS SHOWN .12 HIGH. BLACK, HOT IMPRESSION STAMPING PER ND1002019, CENTRALIZE.
19	MARK CHARACTERS .12 HIGH, BLACK, PER ND1002019, SERIALIZE PER ND1002023.
20	CONTINUITY TEST PER CONDUCTOR CHART. RESISTANCE SHALL BE LESS THAN 1/2 OHM. TEST PER MIL-STD-202, METHOD 303.

SIZE	CODE IDENT NO.	
A	80230	2014645
SCALE-NONE	REV LTR EF	SHEET 3 OF 16

MIL 2084 9-65

NOTE NUMBER	GENERAL NOTES DESCRIPTION
21	INSULATION RESISTANCE SHALL BE GREATER THAN 100 MEGOHMS WITH 500 VDC APPLIED BETWEEN A. THE ASSEMBLY PINS AND STRUCTURE GROUND, EXCEPT THOSE PINS ELECTRICALLY CONNECTED TO STRUCTURE GROUND. B. EACH PIN AND ALL OTHER PINS NOT ELECTRICALLY CONNECTED, INCLUDING ALL SPARE PINS. TEST PER MIL-STD-202, METHOD 302, EXCEPT ELECTRIFICATION TIME NOT APPLICABLE.
22	PRESEAL BACK OF CONNECTOR P26 PRIOR TO ENCAPSULATION PER ND1002187 TYPE III USING ITEMS 21,22,25, AND 26.
23	ENCAPSULATE BACK OF CONNECTORS ~~P26~~ PER ND1002236 USING ITEMS 23 AND 24.

LEAD TOLERANCE CHART

	LEAD LG	JKT STRIP LG	SHIELD STRIP LG	LEAD CUT LG	INS STRIP LG
UNDER 3 INCHES	+ .12-.00	+.06-.06	+.06-.06	+.06-.06	+.06-.00
3 INCH TO 3 FT	+ .50-.00	+.25-.25	+.25-.25	+.25-.25	
3 FT TO 10 FT	+1.00-.00				
10 FT AND OVER	+2.00-.00				

NOTE NUMBER	GENERAL NOTES DESCRIPTION
24	Perform Workmanship Vibration: A. Sinusoidal sweep at 3.5 g rms. Limited to 0.3 inch peak to peak displacement, from 10 to 2000 cps at a rate of 4 octaves per minute. B. Vibration along the X axis of the space craft. C. Monitor for discontinuities of 10μ seconds or greater during vibration. D. Complete continuity and insulation resistance testing must be accomplished after vibration.

SIZE	CODE IDENT NO.	
A	80230	2014645
SCALE-NONE	REV LTR G	SHEET 4 OF 16

MIL 2084 9-65

REVISIONS

SYM	DESCRIPTION	DATE	APPROVAL
E	REPLACES REV D WITH CHANGE PER TDRR [illegible]	24 NOV 65	J.A.C.
F	ADD CONFIGURATION AND CHANGES PER TDRR 24810		
G	Revised per TDAR 25306	7/4/66	[illegible]

APPLICATION

NEXT ASSY	USED ON
2014567-011	2014567-011

REV	E	F	G	E	F	E	E	E	E	F	E	E	E	F	E	F
SHEET	1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16

REV STATUS REV
OF SHEETS SHEET

MIT INSTRUMENTATION LAB CAMBRIDGE, MASS.

MANNED SPACECRAFT CENTER HOUSTON, TEXAS

G&N INTERCONNECT HARNESS "E" (C/M, BLOCK II)

DRAWN E. LITZOW 26 MAY 65
CHECKED FESLER 28 MAY 65
APPROVAL Paul Watson DEC 20, 65
APPROVAL [illegible] 12 Apr 66
NASA APPROVAL A. C. METZGER
MIT APPROVAL [illegible] 21 Apr 66
CONTRACT NAS 9-497

CODE IDENT NO. 80230 SIZE A 2014645 REV G

SCALE None SHEET 1 OF 16

SEE NOTE

LIST OF MATERIALS

NUMBER	ITEM	QTY	PART NO.	DESCRIPTION
9	18	25	1010958- 1	PLUG, PROTECTIVE, SEALING
9	19	19	1010402- 2	SLEEVE, SOLDER
9	20	17	1012534- 36	INSULATION, SLEEVING (HEAT SHRINKABLE)
	21	AR	1006277	SILICA, PULVERIZED, PYROGENIC
	22	AR	1008822	COLORANT, EPOXY BASE
	23	AR	1012504	PRIMER, METAL PARTS
	24	AR	1012503	COMPOUND, POTTING, POLYURETHANE
	25	AR	1010679	ADHESIVE, ACTIVATOR
	26	AR	1010661	EPOXY RESIN
	27	1	2014670- 4	ADAPTER, CONNECTOR
9	28	AR	1012507- 4	TAPE, LACING
	29	AR	MIL-T-23594	TAPE, TEFLON, TYPE II, 1 INCH WIDE
	30	AR	MIL-T-23594	TAPE, TEFLON, TYPE II, 1/4 INCH WIDE
	31	1	2014645-011	WIRE PER 1010789-029, 26 AWG, BLK, 1 FT TOT LG.

SIZE	CODE IDENT NO.	
A	80230	2014645
SCALE-NONE	REV LTR EF	SHEET 6 OF 16

MIL 2084 9-65

LEAD IDENT	WIRE MATL ITEM	LEAD LG	CIRCUIT PT FROM (A) TO (B)	TERM. AREA NO.	JKT STRIP LG	SHLD STRIP LG	LEAD CUT LG	INS STRIP LG	TIN	NOTE ONE, FIG	ACCESSORY ITEMS	REMARKS
E 1	8				1.75 1.00	1.50 .75				7 6B	20 19	
E 1B	10		P26-G13 SHLD E1					.18 .20	NO NO		15	
E 1R			P24-21 P26-G14					.13 .18	NO NO		14 16	
E 1Y			P24-39 P26-G15					.13 .18	NO NO		14 16	
E 2	8				1.75 1.00	1.50 .75				7 6B	20 19	
E 2B	10		P26-F13 SHLD E2					.18 .20	NO NO		15	
E 2R			P24-65 P26-F14					.13 .18	NO NO		14 16	
E 2Y			P24-40 P26-F15					.13 .18	NO NO		14 16	
E 3	8				1.75 1.00	1.50 .75				7 6B	20 19	
E 3B	10		P26-C2 SHLD E3					.18 .20	NO NO		15	
E 3R			P24-64 P26-B2					.13 .18	NO NO		14 16	
E 3Y			P24-63 P26-B1					.13 .18	NO NO		14 16	

SIZE	CODE IDENT NO.	
A	80230	2014645
SCALE-NONE	REV LTR E	SHEET 7 OF 16

MIL 2084 9-65

LIST OF MATERIALS

NUMBER	ITEM	QTY	PART NO.	DESCRIPTION
	1	1	2014645-001	WIRE PER 1010789-006, 22 AWG, YEL, 5 FT TOT LG
	2	1	2014645-002	WIRE PER 1010789-001, 24 AWG, YEL, 5 FT TOT LG
	3	1	2014645-003	WIRE PER 1010789-016, 26 AWG, YEL, 5 FT TOT LG
	4	1	2014645-004	WIRE PER 1010789-003, 24 AWG, YEL, RED, 15 FT TOT LG
	6	1	2014645-005	WIRE PER 1010789-018, 26 AWG, YEL, RED, GRN, 20 FT TOTAL LENGTH
	7	1	2014645-006	WIRE PER 1010789-005, 24 AWG, YEL, RED, GRN, BRN, 5 FT TOT LG
	8	1	2014645-007	WIRE PER 1010789-015, 26 AWG, YEL, RED, YEL JKT, 40 FT TOT LG
	9	1	2014645-008	WIRE PER 1010789-013, 24 AWG, YEL, RED, GRN, YEL JKT, 10 FT TOT LG
	10	1	2014645-009	WIRE PER 1010789-002, 24 AWG, BLK, 15 FT TOT LG
	11	1	2014645-010	WIRE PER 1010789-012, 24 AWG, YEL, RED, YEL JKT 5 FT TOT LG
	12	1	2014745-011	CONNECTOR, PLUG, ELECTRICAL (P26)
9	13	1	1010929-004	CONNECTOR, PLUG, ELECTRICAL (P24)
9	14	~~85~~ X	1010770- 2	CONTACT, SOCKET, SUPPLIED WITH CONNECTOR 1010929
9	15	71	1010955- 1	CONTACT, MALE
9	16	41	1010955- 2	CONTACT, MALE

SIZE	CODE IDENT NO.	
A	80230	2014645
SCALE-NONE	REV LTR EF	SHEET 5 OF 16

MIL 2084 9-65

LEAD IDENT	WIRE MATL ITEM	LEAD LG	CIRCUIT PT FROM (A) TO (B)	TERM. AREA NO.	JKT STRIP LG	SHLD STRIP LG	LEAD CUT LG	INS STRIP LG	TIN	NOTE ONE, FIG	ACCESSORY ITEMS	REMARKS
E 4	8				1.75 1.00	1.50 .75				7 6B	20 19	
E 4B	10		P26-C3 SHLD E4					.18 .20	NO NO		15	
E 4R			P24-62 P26-A3					.13 .18	NO NO		14 16	
E 4Y			P24-38 P26-B3					.13 .18	NO NO		14 16	
E 5	8				1.75 1.00	1.50 .75				7 6B	20 19	
E 5B	10		P26-G4 SHLD E5					.18 .20	NO NO		15	
E 5R			P24-75 P26-G6					.13 .18	NO NO		14 16	
E 5Y			P24-76 P26-G5					.13 .18	NO NO		14 16	
E 6	8				1.75 1.00	1.50 .75				7 6B	20 19	
E 6B	10		P26-F3 SHLD E6					.18 .20	NO NO		15	
E 6R			P24-52 P26-F2					.13 .18	NO NO		14 16	
E 6Y			P24-77 P26-F1					.13 .18	NO NO		14 16	

SIZE	CODE IDENT NO.	
A	80230	2014645
SCALE-NONE	REV LTR E	SHEET 8 OF 16

MIL 2084 9-65

WIRING HARNESS E — 2014645 — F

LEAD IDENT	WIRE MATL ITEM	LEAD LG	CIRCUIT PT FROM (A) TO (B)	TERM. AREA NO.	JKT STRIP LG	SHLD STRIP LG	LEAD CUT LG	INS STRIP LG	TIN	NOTE ONE, FIG	ACCESSORY ITEMS	REMARKS
E	10	8			1.75 1.00	1.50 .75				7 6B	20 19	
E	10B	10	P26-C5 SHLD E10					.18 .20	NO NO		15	
E	10R		P24-71 P26-A5					.13 .18	NO NO		14 16	
E	10Y		P24-47 P26-B5					.13 .18	NO NO		14 16	
E	11	4										
E	11R		P24-44 P26-B14					.13 .18	NO NO		14 15	
E	11Y		P24-24 P26-C14					.13 .18	NO NO		14 15	
E	13	8			1.75 1.00	1.50 .75				7 6B	20 19	
E	13B	31	P26-D6 SHLD E13					.18 .20	NO NO		15	
E	13R		P24-70 P26-D5					.13 .18	NO NO		14 16	
E	13Y		P24-46 P26-D4					.13 .18	NO NO		14 16	
E	14	8			1.75 1.00	1.50 .75				7 6B	20 19	

SIZE	CODE IDENT NO.		
A	80230	2014645	
SCALE-NONE	REV LTR F	SHEET 10 OF 16	

MIL 2084 9-65

WIRING HARNESS E — 2014645 — F

LEAD IDENT	WIRE MATL ITEM	LEAD LG	CIRCUIT PT FROM (A) TO (B)	TERM. AREA NO.	JKT STRIP LG	SHLD STRIP LG	LEAD CUT LG	INS STRIP LG	TIN	NOTE ONE, FIG	ACCESSORY ITEMS	REMARKS
E	14B	10	P26-C4 SHLD E14					.18 .20	NO NO		15	
E	14R		P24-48 P26-A4					.13 .18	NO NO		14 16	
E	14Y		P24-72 P26-B4					.13 .18	NO NO		14 16	
E	15	7										
E	15G		P24-80 P26-F9					.13 .18	NO NO		14 15	
E	15N		P24-79 P26-D10					.13 .18	NO NO		14 15	
E	15R		P24-54 P26-F10					.13 .18	NO NO		14 15	
E	15Y		P24-55 P26-D9					.13 .18	NO NO		14 15	
E	16	8			1.75 1.00	1.50 .75				7 6B	20 19	
E	16B	10	P26-C10 SHLD E16					.18 .20	NO NO		15	
E	16R		P24-32 P26-B10					.13 .18	NO NO		14 16	
E	16Y		P24-33 P26-A10					.13 .18	NO NO		14 16	

SIZE	CODE IDENT NO.		
A	80230	2014645	
SCALE-NONE	REV LTR F	SHEET 11 OF 16	

MIL 2084 9-65

WIRING HARNESS E — 2014645 — E

LEAD IDENT	WIRE MATL ITEM	LEAD LG	CIRCUIT PT FROM (A) TO (B)	TERM. AREA NO.	JKT STRIP LG	SHLD STRIP LG	LEAD CUT LG	INS STRIP LG	TIN	NOTE ONE, FIG	ACCESSORY ITEMS	REMARKS
E	7	8			1.75 1.00	1.50 .75				7 6B	20 19	
E	7B	10	P26-H3 SHLD E7					.18 .20	NO NO		15	
E	7R		P24-51 P26-H1					.13 .18	NO NO		14 16	
E	7Y		P24-30 P26-H2					.13 .18	NO NO		14 16	
E	8	8			1.75 1.00	1.50 .75				7 6B	20 19	
E	8B	10	P26-G3 SHLD E8					.18 .20	NO NO		15	
E	8R		P24-78 P26-G1					.13 .18	NO NO		14 16	
E	8Y		P24-53 P26-G2					.13 .18	NO NO		14 16	
E	9	11			1.75 1.00	1.50 .75				7 6B	20 19	
E	9B	10	P26-D3 SHLD E9					.18 .20	NO NO		15	
E	9R		P24-74 P26-D1					.13 .18	NO NO		14 15	
E	9Y		P24-50 P26-D2					.13 .18	NO NO		14 15	

SIZE	CODE IDENT NO.		
A	80230	2014645	
SCALE-NONE	REV LTR E	SHEET 9 OF 16	

MIL 2084 9-65

WIRING HARNESS E — 2014645 — E

LEAD IDENT	WIRE MATL ITEM	LEAD LG	CIRCUIT PT FROM (A) TO (B)	TERM. AREA NO.	JKT STRIP LG	SHLD STRIP LG	LEAD CUT LG	INS STRIP LG	TIN	NOTE ONE, FIG	ACCESSORY ITEMS	REMARKS
E	17	8			1.75 1.00	1.50 .75				7 6B	20 19	
E	17B	10	P26-C9 SHLD E17					.18 .20	NO NO		15	
E	17R		P24-81 P26-A9					.13 .18	NO NO		14 16	
E	17Y		P24-56 P26-B9					.13 .18	NO NO		14 16	
E	18	4										
E	18R		P24-85 P26-K12					.13 .18	NO NO		14 15	
E	18Y		P24-60 P26-H12					.13 .18	NO NO		14 15	
E	19	4										
E	19R		P24-59 P26-H13					.13 .18	NO NO		14 15	
E	19Y		P24-84 P26-K13					.13 .18	NO NO		14 15	
E	20	2	P24-82 P26-C13					.13 .18	NO NO		14 15	
E	21	9			1.75 1.00	1.50 .75				7 6B	20 19	

SIZE	CODE IDENT NO.		
A	80230	2014645	
SCALE-NONE	REV LTR E	SHEET 12 OF 16	

MIL 2084 9-65

WIRING HARNESS E 2014645 EF

LEAD IDENT	WIRE MATL ITEM	LEAD LG	CIRCUIT PT FROM (A) TO (B)	TERM. AREA NO.	JKT STRIP LG	SHLD STRIP LG	LEAD CUT LG	INS STRIP LG	TIN	NOTE ONE, FIG	ACCESSORY ITEMS	REMARKS
E 21B	31		P26-D6					.18	NO		[redacted]	
			SHLD E21					.20	NO			
E 21G			P24-13					.13	NO		14	
			P26-A6					.18	NO		15	
E 21R			P24-12					.13	NO		14	
			P26-C6					.18	NO		15	
E 21Y			P24-4					.13	NO		14	
			P26-B6					.18	NO		15	
E 22	9				1.75	1.50						
					1.00	.75						
E 22B	10		P26-D8					.18	NO		15	
			SHLD E22					.20	NO			
E 22G			P24-3					.13	NO		14	
			P26-B8					.18	NO		15	
E 22R			P24-10					.13	NO		14	
			P26-C8					.18	NO		15	
E 22Y			P24-2					.13	NO		14	
			P26-A8					.18	NO		15	
E 23	9				1.75	1.50						
					1.00	.75						
E 23B	10		P26-D7					.18	NO		15	
			SHLD E23					.20	NO			
E 23G			P24-7					.13	NO		14	
			P26-A7					.18	NO		15	

SIZE	CODE IDENT NO.	
A	80230	2014645
SCALE-NONE	REV LTR EF	SHEET 13 OF 16

MIL 2084 9-65

WIRING HARNESS E 2014645 E

LEAD IDENT	WIRE MATL ITEM	LEAD LG	CIRCUIT PT FROM (A) TO (B)	TERM. AREA NO.	JKT STRIP LG	SHLD STRIP LG	LEAD CUT LG	INS STRIP LG	TIN	NOTE ONE, FIG	ACCESSORY ITEMS	REMARKS
E 23R			P24-8					.13	NO		14	
			P26-C7					.18	NO		15	
E 23Y			P24-19					.13	NO		14	
			P26-B7					.18	NO		15	
E 24	6											
E 24G			P24-35					.13	NO		14	
			P26-B13					.18	NO		16	
E 24R			P24-34					.13	NO		14	
			P26-A13					.18	NO		16	
E 24Y			P24-58					.13	NO		14	
			P26-A12					.18	NO		16	
E 25	4											
E 25R			P24-43					.13	NO		14	
			P26-K6					.18	NO		15	
E 25Y			P24-23					.13	NO		14	
			P26-K7					.18	NO		15	
E 26	4											
E 26R			P24-68					.13	NO		14	
			P26-K10					.18	NO		15	
E 26Y			P24-67					.13	NO		14	
			P26-K11					.18	NO		15	

SIZE	CODE IDENT NO.	
A	80230	2014645
SCALE-NONE	REV LTR E	SHEET 14 OF 16

MIL 2084 9-65

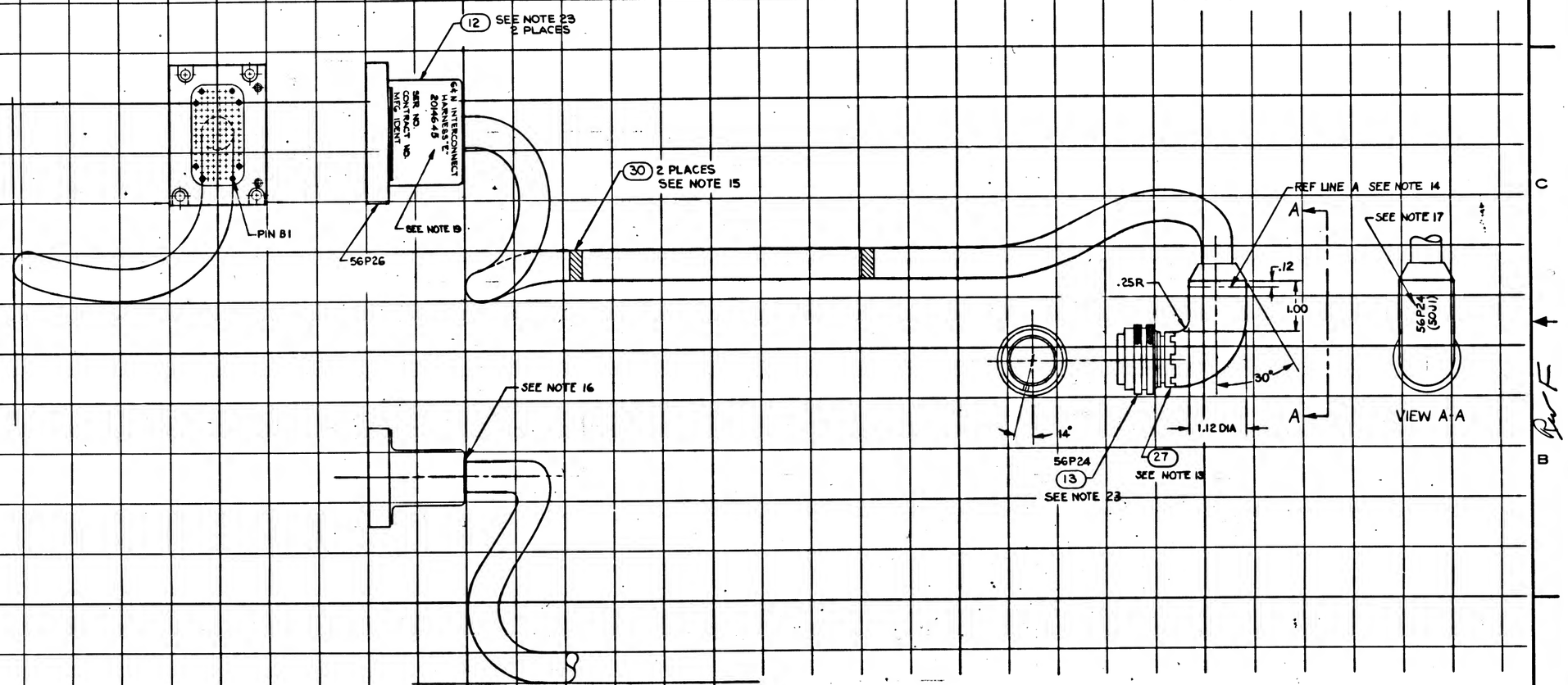
WIRING HARNESS E [redacted] 2014645 E

LEAD IDENT	WIRE MATL ITEM	LEAD LG	CIRCUIT PT FROM (A) TO (B)	TERM. AREA NO.	JKT STRIP LG	SHLD STRIP LG	LEAD CUT LG	INS STRIP LG	TIN	NOTE ONE, FIG	ACCESSORY ITEMS	REMARKS
E 28	1		P24-20					.13	NO		14	
			P26-D15					.18	NO		15	
E 29	3		P24-1					.13	NO		14	
			P26-K3					.18	NO		15	
E 34	8				1.75	1.50				6B	19	
					1.00	.75				6B	19	
E 34A	10		SHLD E34					.20	NO			
			P24-42					.13	NO		14	
E 34B	10		P26-D14					.18	NO		15	
			SHLD E34					.20	NO			
E 34R			P24-41					.13	NO		14	
			P26-B15					.18	NO		16	
E 34Y			P24-66					.13	NO		14	
			P26-C15					.18	NO		16	

SIZE	CODE IDENT NO.	
A	80230	2014645
SCALE-NONE	REV LTR E	SHEET 15 OF 16

MIL 2084 9-65

REVISIONS REV F TDRR 248.0					
SYM	ZONE	DESCRIPTION	CHG NO.	DATE	APPD
		SEE SHEET 1 FOR REVISION RECORD			



MASTER

2014657-011		UNLESS OTHERWISE SPECIFIED DIMENSIONS ARE IN INCHES TOLERANCES ON 2 PLACE DECIMALS ANGLES	MIT INSTRUMENTATION LAB CAMBRIDGE, MASS	MANNED SPACECRAFT CENTER HOUSTON, TEXAS
NEXT ASSY	USED ON	FRACTIONS ± — ±.03 ±2°	DRAWN DATE 12-16-65	G&N INTERCONNECT HARNESS "E" (C/M BLOCK II)
APPLICATION		DO NOT SCALE THIS DRAWING	CHECKED 12-16-65	
		MATERIAL —	APPROVAL DEC 16, 65	
		CONTRACT	A. C. METZGER NASA APPROVAL	CODE IDENT NO. / SIZE D / 2014645
			MIT APPROVAL	SCALE 1:1 / SHEET 16 OF 16

APPLICATION		REVISIONS			
NEXT ASSY	USED ON	SYM	DESCRIPTION	DATE	APPROVAL
2014567-011	2014567-011	E	REPLACES REV D WITH CHANGE PER TDRR	24-NOV-65	B / J.A.C.
		F	ADD CONFIGURATION AND CHANGES PER TDRR 24810		
	(M)	G	Revised per TDRR 25306	2/4/66	[illegible]
		H	REVISED PER TDRR 28411	10 MAR 66	J.K. [illegible]

REV																								
SHEET																								
REV STATUS	REV	H	G	H	H	G	H	G	G	G	G	G	G	H	G	H	H							
OF SHEETS	SHEET	1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16	17						

MIT
INSTRUMENTATION LAB
CAMBRIDGE, MASS

MANNED
SPACECRAFT CENTER
HOUSTON, TEXAS

DRAWN E LITROW DATE 26 MAY 65
CHECKED P FESLER 28 MAY 65
APPROVAL Paul Watson DEC 20, 65
APPROVAL [illegible] 12/20/65

G & N INTERCONNECT HARNESS "E"

(C/M, BLOCK II)

NASA APPROVAL A. C. [illegible]
MIT APPROVAL [illegible] 21 Dec

CODE IDENT NO.	SIZE		REV
80230	A	2014645	H

CONTRACT NAS 9-497 SCALE NONE SHEET 1 OF 17

NOTE NUMBER	GENERAL NOTES DESCRIPTION
1	SHIELD TERMINATION FIGURES ARE PER ND1002071 FOR FIGURE 6B AND ND 1002032 FOR FIGURE 7.
2	INTERPRET DRAWING IN ACCORDANCE WITH STANDARDS PRESCRIBED BY MIL-D-70327.
3	INTERCONNECT LIST FOR THIS HARNESS IS 2014675.
4	PARTIAL CIRCUIT POINTS ARE SHOWN. PREFIX WITH UNIT NUMBER 56 FOR COMPLETE CIRCUIT POINT
5	THE SUFFIX LETTER OF A CONDUCTOR IDENTIFICATION NUMBER IDENTIFIES A SHIELD LEAD, COLOR, OR MARKED LETTER. A - FROM END OF SHIELD B - TO END OF SHIELD G - GREEN K - BLACK L - BLUE N - BROWN R - RED W - WHITE Y - YELLOW
6	ASTERISK DENOTES LOWER CASE LETTER
7	GRID MODULE ON PICTURE SHEET IS 1 INCH TRUE POSITION
8	UNLESS OTHERWISE SPECIFIED FEATURE CENTERLINES ON PICTURE SHEET ARE LOCATED WITHIN + OR - .25. ENDS OF HOOKUP WIRES OR ACCESSORIES ARE LOCATED WITHIN .12.
9	VENDOR ITEM - SEE SOURCE CONTROL OR SPECIFICATION CONTROL DRAWING.
10	CRIMP CONTACTS PER ND1002032.

NOTE NUMBER	GENERAL NOTES DESCRIPTION
11	ALL UNUSED CONTACT CAVITIES SHALL BE FILLED WITH A CONTACT OR CONTACT AND SEALING PLUG AS FOLLOWS CONNECTOR 56P24, USE ITEM NUMBERS 14 AND 18. CONNECTOR 56P26, USE ITEM NUMBER 15.
12	LACE HARNESS PER ND1002032 USING ITEM NUMBER 28.
13	APPLY BONDING MATERIAL PER ND1002187, TYPE I, USING ITEMS 25 AND 26, TO THE THREADED PORTION OF CONNECTOR AND TO THE THREADED PORTION OF THE ADAPTER PRIOR TO ASSEMBLY.
14	ALL SHIELDED TERMINATIONS SHALL BE LOCATED BELOW REFERENCE LINE A. THERE SHALL BE NO EXPOSED CONDUCTORS OR ACCESSORY ITEMS AT THE SURFACE OF THE POTTING COMPOUND.
15	BEFORE LACING HARNESS, APPLY 2 TURNS OF TAPE, ITEM 30, TO INDICATE CABLE CLAMP LOCATION.
16	WRAP TAPE AROUND HARNESS IN AREA SHOWN AS REQUIRED TO BUILD UP DIAMETER TO FIT SHELL HOLE.
17	MARK CONNECTOR WITH REFERENCE DESIGNATION AS SHOWN .12 HIGH. BLACK, PER ND1002019, CENTRALIZE.
19	MARK CHARACTERS .12 HIGH, BLACK, PER ND1002019, SERIALIZE PER ND1002023.
20	CONTINUITY TEST PER CONDUCTOR CHART. RESISTANCE SHALL BE LESS THAN 1/2 OHM. TEST PER MIL-STD-202, METHOD 303.

NOTE NUMBER	GENERAL NOTES DESCRIPTION
21	INSULATION RESISTANCE SHALL BE GREATER THAN 100 MEGOHMS WITH 500 VDC APPLIED BETWEEN A. THE ASSEMBLY PINS AND STRUCTURE GROUND, EXCEPT THOSE PINS ELECTRICALLY CONNECTED TO STRUCTURE GROUND. B. EACH PIN AND ALL OTHER PINS NOT ELECTRICALLY CONNECTED, INCLUDING ALL SPARE PINS. TEST PER MIL-STD-202, METHOD 302, EXCEPT ELECTRIFICATION TIME NOT APPLICABLE. SHORT CIRCUIT CURRENT SHALL BE LIMITED TO 15 MA. AFTER TEST PER MIL-STD-202.
22	PRESEAL BACK OF CONNECTOR P26 PRIOR TO ENCAPSULATION PER ND1002187 TYPE III USING ITEMS 21,22,25, AND 26.
23	ENCAPSULATE BACK OF CONNECTORS PER ND1002236 USING ITEMS 23 AND 24.
24	PERFORM WORKMANSHIP VIBRATION A. SINUSOIDAL SWEEP AT 3.5 G RMS. LIMITED TO 0.3 INCH PEAK TO PEAK DISPLACEMENT, FROM 10 TO 2000 CPS AT A RATE OF 4 OCTAVES PER MINUTE. B. VIBRATION ALONG THE X AXIS OF THE SPACE CRAFT. C. MONITOR FOR DISCONTINUITIES OF 10 MICRO SECONDS OR GREATER DURING VIBRATION. D. COMPLETE CONTINUITY AND INSULATION RESISTANCE TESTING MUST BE ACCOMPLISHED AFTER VIBRATION.

NOTE NUMBER — GENERAL NOTES DESCRIPTION

LEAD TOLERANCE CHART

	LEAD LG	JKT STRIP LG	SHIELD STRIP LG	LEAD CUT LG	INS STRIP LG
UNDER 3 INCHES	+ .12-.00	+.06-.06	+.06-.06	+.06-.06	+.06-.00
3 INCH TO 3 FT	+ .50-.00	+.25-.25	+.25-.25	+.25-.25	
3 FT TO 10 FT	+1.00-.00				
10 FT AND OVER	+2.00-.00				

SEE NOTE

LIST OF MATERIALS

NUMBER	ITEM	QTY	PART NO.	DESCRIPTION
	1	1	2014645-001	WIRE PER 1010789-006, 22 AWG, YEL, 5 FT TOT LG
	2	1	2014645-002	WIRE PER 1010789-001, 24 AWG, YEL, 5 FT TOT LG
	3	1	2014645-003	WIRE PER 1010789-016, 26 AWG, YEL, 5 FT TOT LG
	4	1	2014645-004	WIRE PER 1010789-003, 24 AWG, YEL, RED, 15 FT TOT LG
	6	1	2014645-005	WIRE PER 1010789-018, 26 AWG, YEL, RED, GRN, 20 FT TOTAL LENGTH
	7	1	2014645-006	WIRE PER 1010789-005, 24 AWG, YEL, RED, GRN, BRN, 5 FT TOT LG
	8	1	2014645-007	WIRE PER 1010789-015, 26 AWG, YEL, RED, YEL JKT, 40 FT TOT LG
	9	1	2014645-008	WIRE PER 1010789-013, 24 AWG, YEL, RED, GRN, YEL JKT, 10 FT TOT LG
	10	1	2014645-009	WIRE PER 1010789-002, 24 AWG, BLK, 15 FT TOT LG
	11	1	2014645-010	WIRE PER 1010789-012, 24 AWG, YEL, RED, YEL JKT 5 FT TOT LG
	12	1	2014745-011	CONNECTOR, PLUG, ELECTRICAL (P26)
9	13	1	1010929-004	CONNECTOR, PLUG, ELECTRICAL (P24)
9	14	X	1010770- 2	CONTACT, SOCKET, SUPPLIED WITH CONNECTOR 1010929
9	15	80	1010955- 1	CONTACT, MALE
9	16	32	1010955- 2	CONTACT, MALE

SIZE	CODE IDENT NO.	
A	80230	2014645
SCALE-NONE	REV LTR H	SHEET 6 OF 17

MIL 2084 9-65

SEE NOTE

LIST OF MATERIALS

NUMBER	ITEM	QTY	PART NO.	DESCRIPTION
9	18	25	1010958- 1	PLUG, PROTECTIVE, SEALING
9	19	19	1010402- 2	SLEEVE, SOLDER
9	20	17	1012534- 36	INSULATION, SLEEVING (HEAT SHRINKABLE)
	21	AR	1006277	SILICA, PULVERIZED, PYROGENIC
	22	AR	1008822	COLORANT, EPOXY BASE
	23	AR	1012504	PRIMER, METAL PARTS
	24	AR	1012503	COMPOUND, POTTING, POLYURETHANE
	25	AR	1010679	ADHESIVE, ACTIVATOR
	26	AR	1010661	EPOXY RESIN
	27	1	2014670- 4	ADAPTER, CONNECTOR
9	28	AR	1012507- 4	TAPE, LACING
	29	AR	MIL-T-23594	TAPE, TEFLON, TYPE II, 1 INCH WIDE
	30	AR	MIL-T-23594	TAPE, TEFLON, TYPE II, 1/4 INCH WIDE
	31	1	2014645-011	WIRE PER 1010789-024, 26AWG, BLK, 1 FT TOT LG.

SIZE	CODE IDENT NO.	
A	80230	2014645
SCALE-NONE	REV LTR G	SHEET 7 OF 17

MIL 2084 9-65

LEAD IDENT	WIRE MATL ITEM	LEAD LG	CIRCUIT PT FROM (A) TO (B)	TERM. AREA NO.	JKT STRIP LG	SHLD STRIP LG	LEAD CUT LG	INS STRIP LG	TIN	NOTE ONE, FIG	ACCESSORY ITEMS	REMARKS
E	1	8			1.75 1.00	1.50 .75				7 6B	20 19	
E	1B	10	P26-G13 SHLD E1					.18 .20	NO NO		15	
E	1R		P24-21 P26-G14					.13 .18	NO NO		14 16	
E	1Y		P24-39 P26-G15					.13 .18	NO NO		14 16	
E	2	8			1.75 1.00	1.50 .75				7 6B	20 19	
E	2B	10	P26-F13 SHLD E2					.18 .20	NO NO		15	
E	2R		P24-65 P26-F14					.13 .18	NO NO		14 16	
E	2Y		P24-40 P26-F15					.13 .18	NO NO		14 16	
E	3	8			1.75 1.00	1.50 .75				7 6B	20 19	
E	3B	10	P26-C2 SHLD E3					.18 .20	NO NO		15	
E	3R		P24-64 P26-B2					.13 .18	NO NO		14 16	
E	3Y		P24-63 P26-B1					.13 .18	NO NO		14 16	

SIZE	CODE IDENT NO.	
A	80230	2014645
SCALE-NONE	REV LTR G	SHEET 8 OF 17

MIL 2084 9-65

LEAD IDENT	WIRE MATL ITEM	LEAD LG	CIRCUIT PT FROM (A) TO (B)	TERM. AREA NO.	JKT STRIP LG	SHLD STRIP LG	LEAD CUT LG	INS STRIP LG	TIN	NOTE ONE, FIG	ACCESSORY ITEMS	REMARKS
E	4	8			1.75 1.00	1.50 .75				7 6B	20 19	
E	4B	10	P26-C3 SHLD E4					.18 .20	NO NO		15	
E	4R		P24-62 P26-A3					.13 .18	NO NO		14 16	
E	4Y		P24-38 P26-B3					.13 .18	NO NO		14 16	
E	5	8			1.75 1.00	1.50 .75				7 6B	20 19	
E	5B	10	P26-G4 SHLD E5					.18 .20	NO NO		15	
E	5R		P24-75 P26-G6					.13 .18	NO NO		14 16	
E	5Y		P24-76 P26-G5					.13 .18	NO NO		14 16	
E	6	8			1.75 1.00	1.50 .75				7 6B	20 19	
E	6B	10	P26-F3 SHLD E6					.18 .20	NO NO		15	
E	6R		P24-52 P26-F2					.13 .18	NO NO		14 16	
E	6Y		P24-77 P26-F1					.13 .18	NO NO		14 16	

SIZE	CODE IDENT NO.	
A	80230	2014645
SCALE-NONE	REV LTR G	SHEET 9 OF 17

MIL 2084 9-65

LEAD IDENT	WIRE MATL ITEM	LEAD LG	CIRCUIT PT FROM (A) TO (B)	TERM. AREA NO.	JKT STRIP LG	SHLD STRIP LG	LEAD CUT LG	INS STRIP LG	TIN	NOTE ONE, FIG	ACCESSORY ITEMS	REMARKS
E	7	8			1.75	1.50				7	20	
					1.00	.75				6B	19	
E	7B	10	P26-H3					.18	NO		15	
			SHLD E7					.20	NO			
E	7R		P24-51					.13	NO		14	
			P26-H1					.18	NO		16	
E	7Y		P24-30					.13	NO		14	
			P26-H2					.18	NO		16	
E	8	8			1.75	1.50				7	20	
					1.00	.75				6B	19	
E	8B	10	P26-G3					.18	NO		15	
			SHLD E8					.20	NO			
E	8R		P24-78					.13	NO		14	
			P26-G1					.18	NO		16	
E	8Y		P24-53					.13	NO		14	
			P26-G2					.18	NO		16	
E	9	11			1.75	1.50				7	20	
					1.00	.75				6B	19	
E	9B	10	P26-D3					.18	NO		15	
			SHLD E9					.20	NO			
E	9R		P24-74					.13	NO		14	
			P26-D1					.18	NO		15	
E	9Y		P24-50					.13	NO		14	
			P26-D2					.18	NO		15	

SIZE	CODE IDENT NO.	
A	80230	2014645
SCALE-NONE	REV LTR G	SHEET 10 OF 17

MIL 2084 9-65

LEAD IDENT	WIRE MATL ITEM	LEAD LG	CIRCUIT PT FROM (A) TO (B)	TERM. AREA NO.	JKT STRIP LG	SHLD STRIP LG	LEAD CUT LG	INS STRIP LG	TIN	NOTE ONE, FIG	ACCESSORY ITEMS	REMARKS
E	10	8			1.75	1.50				7	20	
					1.00	.75				6B	19	
E	10B	10	P26-C5					.18	NO		15	
			SHLD E10					.20	NO			
E	10R		P24-71					.13	NO		14	
			P26-A5					.18	NO		16	
E	10Y		P24-47					.13	NO		14	
			P26-B5					.18	NO		16	
E	11	4										
E	11R		P24-44					.13	NO		14	
			P26-B14					.18	NO		15	
E	11Y		P24-24					.13	NO		14	
			P26-C14					.18	NO		15	
E	13	8			1.75	1.50				7	20	
					1.00	.75				6B	19	
E	13B	31	P26-D6					.18	NO		15	
			SHLD E13					.20	NO			
E	13R		P24-70					.13	NO		14	
			P26-D5					.18	NO		16	
E	13Y		P24-46					.13	NO		14	
			P26-D4					.18	NO		16	
E	14	8			1.75	1.50				7	20	
					1.00	.75				6B	19	

SIZE	CODE IDENT NO.	
A	80230	2014645
SCALE-NONE	REV LTR G	SHEET 11 OF 17

MIL 2084 9-65

LEAD IDENT	WIRE MATL ITEM	LEAD LG	CIRCUIT PT FROM (A) TO (B)	TERM. AREA NO.	JKT STRIP LG	SHLD STRIP LG	LEAD CUT LG	INS STRIP LG	TIN	NOTE ONE, FIG	ACCESSORY ITEMS	REMARKS
E	14B	10	P26-C4					.18	NO		15	
			SHLD E14					.20	NO			
E	14R		P24-48					.13	NO		14	
			P26-A4					.18	NO		16	
E	14Y		P24-72					.13	NO		14	
			P26-B4					.18	NO		16	
E	15	7										
E	15G		P24-80					.13	NO		14	
			P26-F9					.18	NO		15	
E	15N		P24-79					.13	NO		14	
			P26-D10					.18	NO		15	
E	15R		P24-54					.13	NO		14	
			P26-F10					.18	NO		15	
E	15Y		P24-55					.13	NO		14	
			P26-D9					.18	NO		15	
E	16	8			1.75	1.50				7	20	
					1.00	.75				6B	19	
E	16B	10	P26-C10					.18	NO		15	
			SHLD E16					.20	NO			
E	16R		P24-32					.13	NO		14	
			P26-B10					.18	NO		16	
E	16Y		P24-33					.13	NO		14	
			P26-A10					.18	NO		16	

SIZE	CODE IDENT NO.	
A	80230	2014645
SCALE-NONE	REV LTR G	SHEET 12 OF 17

MIL 2084 9-65

LEAD IDENT	WIRE MATL ITEM	LEAD LG	CIRCUIT PT FROM (A) TO (B)	TERM. AREA NO.	JKT STRIP LG	SHLD STRIP LG	LEAD CUT LG	INS STRIP LG	TIN	NOTE ONE, FIG	ACCESSORY ITEMS	REMARKS
E	17	8			1.75	1.50				7	20	
					1.00	.75				6B	19	
E	17B	10	P26-C9					.18	NO		15	
			SHLD E17					.20	NO			
E	17R		P24-81					.13	NO		14	
			P26-A9					.18	NO		16	
E	17Y		P24-56					.13	NO		14	
			P26-B9					.18	NO		16	
E	18	4										
E	18R		P24-85					.13	NO		14	
			P26-K12					.18	NO		15	
E	18Y		P24-60					.13	NO		14	
			P26-H12					.18	NO		15	
E	19	4										
E	19R		P24-59					.13	NO		14	
			P26-H13					.18	NO		15	
E	19Y		P24-84					.13	NO		14	
			P26-K13					.18	NO		15	
E	20	2	P24-82					.13	NO		14	
			P26-C13					.18	NO		15	
E	21	9			1.75	1.50				7	20	
					1.00	.75				6B	19	

SIZE	CODE IDENT NO.	
A	80230	2014645
SCALE-NONE	REV LTR G	SHEET 13 OF 17

MIL 2084 9-65

LEAD IDENT	WIRE MATL ITEM	LEAD LG	CIRCUIT PT FROM (A) TO (B)	TERM. AREA NO.	JKT STRIP LG	SHLD STRIP LG	LEAD CUT LG	INS STRIP LG	TIN	NOTE ONE, FIG	ACCESSORY ITEMS	REMARKS
E 21B	31		P26-D6					.18	NO			
			SHLD E21					.20	NO			
E 21C			P24-13					.13	NO		14	
			P26-A6					.18	NO		15	
E 21R			P24-12					.13	NO		14	
			P26-C5					.18	NO		15	
E 21Y			P24-4					.13	NO		14	
			P26-B6					.18	NO		15	
E 22	9				1.75	1.50				7	20	
					1.00	.75				6B	19	
E 22B	10		P26-D8					.18	NO		15	
			SHLD E22					.20	NO			
E 22G			P24-3					.13	NO		14	
			P26-B8					.18	NO		15	
E 22R			P24-10					.13	NO		14	
			P26-C8					.18	NO		15	
E 22Y			P24-2					.13	NO		14	
			P26-A8					.18	NO		15	
E 23	9				1.75	1.50				7	20	
					1.00	.75				6B	19	
E 23B	10		P26-D7					.18	NO		15	
			SHLD E23					.20	NO			
E 23G			P24-7					.13	NO		14	
			P26-A7					.18	NO		15	

SIZE	CODE IDENT NO.	
A	80230	2014645
SCALE-NONE	REV LTR H	SHEET 14 OF 17

MIL 2084 9-65

LEAD IDENT	WIRE MATL ITEM	LEAD LG	CIRCUIT PT FROM (A) TO (B)	TERM. AREA NO.	JKT STRIP LG	SHLD STRIP LG	LEAD CUT LG	INS STRIP LG	TIN	NOTE ONE, FIG	ACCESSORY ITEMS	REMARKS
E 23R			P24-8					.13	NO		14	
			P26-C7					.18	NO		15	
E 23Y			P24-19					.13	NO		14	
			P26-B7					.18	NO		15	
E 24	6											
E 24G			P24-35					.13	NO		14	
			P26-B13					.18	NO		16	
E 24R			P24-34					.13	NO		14	
			P26-A13					.18	NO		16	
E 24Y			P24-58					.13	NO		14	
			P26-A12					.18	NO		16	
E 25	4											
E 25R			P24-43					.13	NO		14	
			P26-K6					.18	NO		15	
E 25Y			P24-23					.13	NO		14	
			P26-K7					.18	NO		15	
E 26	4											
E 26R			P24-68					.13	NO		14	
			P26-K10					.18	NO		15	
E 26Y			P24-67					.13	NO		14	
			P26-K11					.18	NO		15	

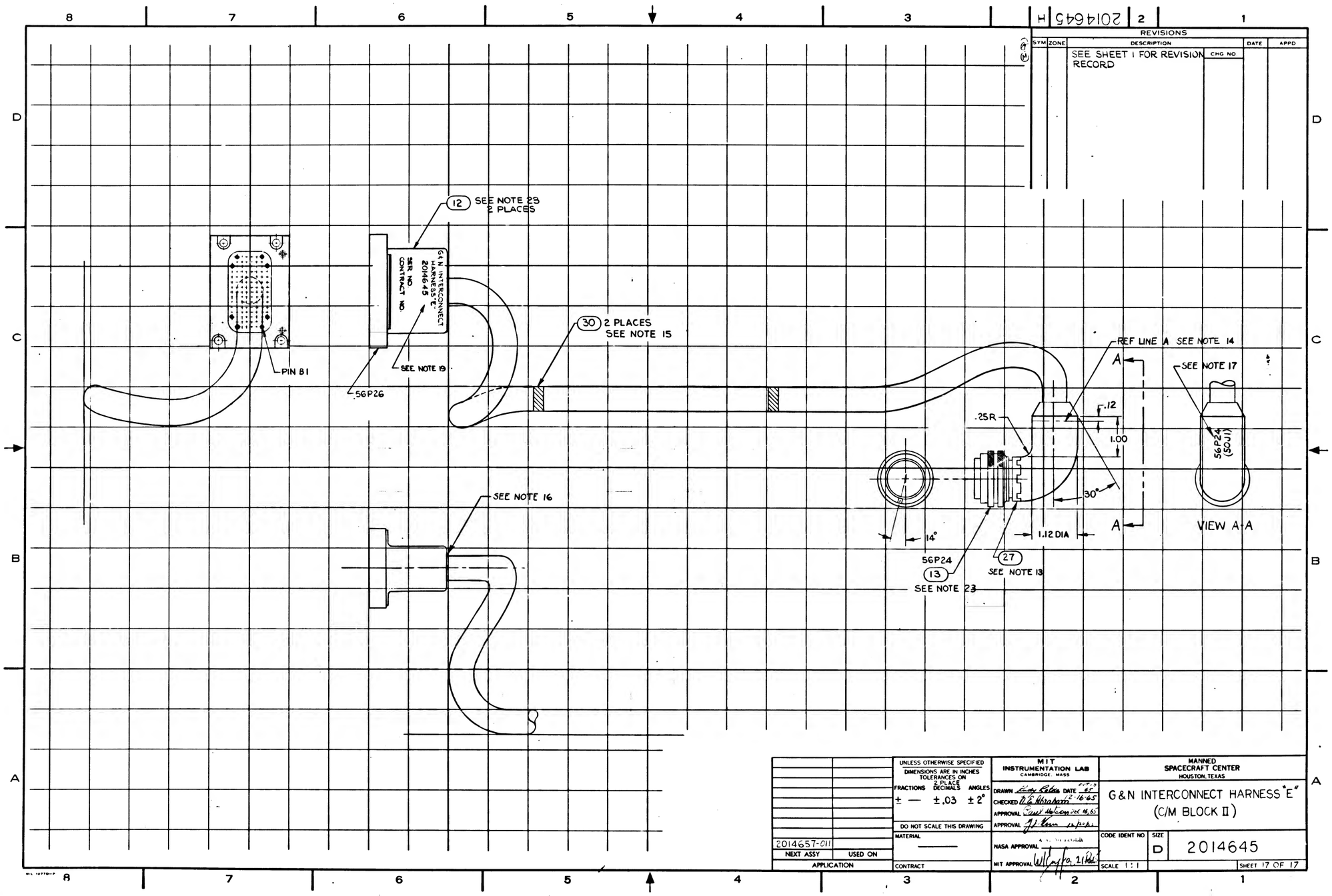
SIZE	CODE IDENT NO.	
A	80230	2014645
SCALE-NONE	REV LTR G	SHEET 15 OF 17

MIL 2084 9-65

LEAD IDENT	WIRE MATL ITEM	LEAD LG	CIRCUIT PT FROM (A) TO (B)	TERM. AREA NO.	JKT STRIP LG	SHLD STRIP LG	LEAD CUT LG	INS STRIP LG	TIN	NOTE ONE, FIG	ACCESSORY ITEMS	REMARKS
E 28	1		P24-20					.13	NO		14	
			P26-D15					.18	NO		15	
E 29	3		P24-1					.13	NO		14	
			P26-K3					.18	NO		16	
E 34	8				1.75	1.50				6B	19	
					1.00	.75				6B	19	
E 34A	10		SHLD E34					.20	NO			
			P24-42					.13	NO		14	
E 34B	10		P26-D14					.18	NO		15	
			SHLD E34					.20	NO			
E 34R			P24-41					.13	NO		14	
			P26-B15					.18	NO		16	
E 34Y			P24-66					.13	NO		14	
			P26-C15					.18	NO		16	

SIZE	CODE IDENT NO.	
A	80230	2014645
SCALE-NONE	REV LTR H	SHEET 16 OF 17

MIL 2084 9-65



REVISIONS					
SYM	ZONE	DESCRIPTION	CHG NO	DATE	APPD
		SEE SHEET 1 FOR REVISION RECORD			

2014645

2014657-011	
NEXT ASSY	USED ON
APPLICATION	

UNLESS OTHERWISE SPECIFIED DIMENSIONS ARE IN INCHES TOLERANCES ON 2-PLACE DECIMALS ANGLES
FRACTIONS ± — ±.03 ±2°

DO NOT SCALE THIS DRAWING

MATERIAL ———

CONTRACT

MIT INSTRUMENTATION LAB CAMBRIDGE, MASS

DRAWN DATE
CHECKED 12-16-65
APPROVAL
APPROVAL
NASA APPROVAL
MIT APPROVAL

MANNED SPACECRAFT CENTER HOUSTON, TEXAS

G&N INTERCONNECT HARNESS "E" (C/M BLOCK II)

CODE IDENT NO | SIZE D | 2014645

SCALE 1:1 | SHEET 17 OF 17

2014646

NOTES:

1. INTERPRET DRAWING IN ACCORDANCE WITH STANDARDS PRESCRIBED BY MIL-D-70327.
2. VENDOR ITEM - SEE SPECIFICATION CONTROL DRAWING.
3. SELECT AS REQUIRED.
4. DRAWING FOR REFERENCE ONLY.

REVISIONS

SYM	ZONE	DESCRIPTION	CHG NO.	DATE	APPD.
C		INITIAL CLASS A RELEASE TORR NO. 22050			

	ITEM NO	NO REQD	PART NO	DESCRIPTION	
		4		CLAMP, PSA CONNECTOR 5052-H32-AL PER QQ-A-250/8, 2" LG x 1/2" WIDE x 1/16" THK	SEE NOTE 2
		2		COVER, PSA CONNECTOR 5052-H32-AL PER QQ-A-250/8, 7" LG x 3" WIDE x 1/32" THK	SEE NOTE 2
		1		CONNECTOR, PSA (P28) 6061-T6-AL PER QQ-A-250/11, 5" LG x 2" WIDE x 1/2" THK	
		1	-007	-002 10	
		1	-006	-009 5	SEE NOTE 2 & 3
		1	-005	-015 20	SEE NOTE 2
		1	-004	-003 10	SEE NOTE 2
		1	-003	-008 5	SEE NOTE 2
		1	-002	-016 5	
		1	2014646-001	WIRE PER 1010789-001 5 FT TOT LG	
		10	1010490-118	SLEEVE, INSULATION (HEAT SHRINKABLE)	
		8	1010490-114	SLEEVE, INSULATION (HEAT SHRINKABLE)	
SEE NOTE 4		X	2014676	INTERCONNECT LIST	
		28	1010955-2	CONTACT, MALE	
		8	M521209-C0415	INSERT, SCREW THD, SELF LOCKING	
		2	6008007	SCREW, CAPTIVE	

ITEM NO.	NO. REQD	PART OR IDENTIFYING NUMBER	NOMENCLATURE OR DESCRIPTION	
	1		CLAMP, CONNECTOR	
	AR	1010989	TAPE, SHIELDING, EMI/RFI	
	AR	1012503	COMPOUND, POTTING, POLYURETHANE	
	3	1010349-6	CLAMP, CABLE	
	1		ADAPTER, POTTING MOLD	
	AR	MIL-T-23594	TAPE, TEFLON	
	AR	1012507-2	TAPE, LACING	SEE NOTE 2 & 3
		1012507-1	TAPE, LACING	
	AR	1010661	EPOXY RESIN	SEE NOTE 2
	AR	1010679	ADHESIVE ACTIVATOR	SEE NOTE 2
	8	1010490-112	INSULATION, SLEEVING, ELECT.	SEE NOTE 2
	16	1010490-110	INSULATION, SLEEVING, ELECT	
	10	1010402-2	SLEEVE, SOLDER	
	1	1010981-30 THRU 1010981-1	GROMMET	SEE NOTE 3
	24	1010958-1	PLUG, PROTECTIVE SEALING	
	78	1010956-1	INSULATOR, MALE	
	50	1010955-1	CONTACT, MALE	
	61	1010770-2	CONTACT, SOCKET	SEE NOTE 2
	1	1010771-207	CONNECTOR, PLUG (P23)	SEE NOTE 2

LIST OF PARTS AND MATERIALS

NEXT ASSY	USED ON
2014567-011	2014567-011

APPLICATION

UNLESS OTHERWISE SPECIFIED DIMENSIONS ARE IN INCHES TOLERANCES ON FRACTIONS ± — DECIMALS ± — ANGLES ± —

DO NOT SCALE THIS DRAWING

MATERIAL —

CONTRACT NAS 9-497

MIT INSTRUMENTATION LAB CAMBRIDGE, MASS.

DWG. NO. CONTRACT

DRAWN E. LITZOW 26 MAY 65 DATE

CHECKED E. ESSLER 28 MAY 65

APPROVAL G C Watson 8-24-65

APPROVAL 8/23/65

NASA APPROVAL 8/31/65

MIT APPROVAL

MANNED SPACECRAFT CENTER HOUSTON, TEXAS

G & N INTERCONNECT HARNESS "F"

CODE IDENT NO. 80230 | SIZE C | 2014646

SCALE — | SHEET 1 OF 1

MIL 1077C-P

APPLICATION		REVISIONS			
NEXT ASSY	USED ON	SYM	DESCRIPTION	DATE	APPROVAL
2014567-011	2014567-011	E	REPLACES REV D WITH CHANGED PER TDRR		
		F	ADD CONFIGURATION AND CHANGES PER TDRR 24811		

REPLACES REV D WITH CHANGE

REV													
SHEET													
REV STATUS	REV			F	E	F	F	E	E	E	E	E	F
OF SHEETS	SHEET			1	2	3	4	5	6	7	8	9	10	11	12	13

MIT INSTRUMENTATION LAB
DWG NO CONTRACT
CAMBRIDGE, MASS.

MANNED SPACECRAFT CENTER
HOUSTON, TEXAS

DRAWN DATE 7 DEC 65
CHECKED DATE 7 DEC 65
APPROVAL 8 DEC 65
APPROVAL

G & N INTERCONNECT HARNESS "F"
(C/M, BLOCK II)

CODE IDENT NO. 80230 | SIZE A | 2014646 | REV F

NASA APPROVAL A. C. MEYZGER
MIT APPROVAL
CONTRACT NAS9-4157 | SCALE | F | SHEET 1 OF 13

NOTE NUMBER	GENERAL NOTES DESCRIPTION
1	SHIELD TERMINATION FIGURES ARE PER ND1002071 FOR FIGURE 6B AND ND 1002032 FOR FIGURE 7.
2	INTERPRET DRAWING IN ACCORDANCE WITH STANDARDS PRESCRIBED BY MIL-D-70327.
3	INTERCONNECT LIST FOR THIS HARNESS IS 2014676.
4	PARTIAL CIRCUIT POINTS ARE SHOWN. PREFIX WITH UNIT NUMBER 56 FOR COMPLETE CIRCUIT POINT
5	THE SUFFIX LETTER OF A CONDUCTOR IDENTIFICATION NUMBER IDENTIFIES A SHIELD LEAD, COLOR, OR MARKED LETTER. A - FROM END OF SHIELD B - TO END OF SHIELD G - GREEN K - BLACK L - BLUE N - BROWN R - RED W - WHITE Y - YELLOW
6	ASTERISK DENOTES LOWER CASE LETTER
7	GRID MODULE ON PICTURE SHEET IS 1 INCH TRUE POSITION
8	UNLESS OTHERWISE SPECIFIED FEATURE CENTERLINES ON PICTURE SHEET ARE LOCATED WITHIN + OR - .25. ENDS OF HOOKUP WIRES OR ACCESSORIES ARE LOCATED WITHIN .12.
9	VENDOR ITEM - SEE SOURCE CONTROL OR SPECIFICATION CONTROL DRAWING.
10	CRIMP CONTACTS PER ND1002032.

MIL 2084 9-65

NOTE NUMBER	GENERAL NOTES DESCRIPTION
11	ALL UNUSED ~~GROMMET HOLES~~ CONTACT CAVITIES SHALL BE FILLED WITH A CONTACT OR CONTACT AND SEALING PLUG AS FOLLOWS CONNECTOR 56P23, USE ITEM NUMBERS 9 AND 13. CONNECTOR 56P28, USE ITEM NUMBER 10.
12	LACE HARNESS PER ND1002032 USING ITEM NUMBER 18.
13	A SMALL QUANTITY OF POTTING COMPOUND MUST BE PUT BETWEEN THE THREADED PORTION OF CONNECTOR AND SILICONE RUBBER GROMMET TO SEAL AND BOND RING TO CONNECTOR PRIOR TO POTTING.
14	ALL SHIELDED TERMINATIONS SHALL BE LOCATED BELOW REFERENCE LINE A. THERE SHALL BE NO EXPOSED CONDUCTORS AT THE SURFACE OF THE POTTING COMPOUND.
15	BEFORE LACING HARNESS, APPLY 2 TURNS OF TAPE, TO INDICATE CABLE CLAMP LOCATION.
16	WRAP TAPE AROUND HARNESS IN AREA SHOWN AS REQUIRED TO BUILD UP DIAMETER TO FIT ~~CABLE CLAMP.~~ SHELL HOLE.
17	MARK CONNECTOR WITH REFERENCE DESIGNATION AS SHOWN .12 HIGH, BLACK, HOT IMPRESSION STAMPING PER ND1002019, CENTRALIZE.
19	MARK CHARACTERS .12 HIGH, BLACK, PER ND1002019, SERIALIZE PER ND1002023.
20	CONTINUITY TEST PER CONDUCTOR CHART. RESISTANCE SHALL BE LESS THAN 1/2 OHM. TEST PER MIL-STD-202, METHOD 303.

MIL 2084 9-65

NOTE NUMBER	GENERAL NOTES DESCRIPTION
21	INSULATION RESISTANCE SHALL BE GREATER THAN 100 MEGOHMS WITH 500 VDC APPLIED BETWEEN A. THE ASSEMBLY PINS AND STRUCTURE GROUND, EXCEPT THOSE PINS ELECTRICALLY CONNECTED TO STRUCTURE GROUND. B. EACH PIN AND ALL OTHER PINS NOT ELECTRICALLY CONNECTED, INCLUDING ALL SPARE PINS. TEST PER MIL-STD-202 METHOD 302 EXCEPT ELECTRIFICATION TIME NOT APPLICABLE.
22	PRESEAL BACK OF CONNECTOR P28 PRIOR TO ENCAPSULATION PER ND1002187 TYPE III USING ITEMS 21,22,23, AND 24.
23	ENCAPSULATE BACK OF CONNECTORS ~~P28~~ PER ND1002236 USING ITEMS 19 AND 20.

LEAD TOLERANCE CHART

	LEAD LG	JKT STRIP LG	SHIELD STRIP LG	LEAD CUT LG	INS STRIP LG
UNDER 3 INCHES	+ .12-.00	+.06-.06	+.06-.06	+.06-.06	+.06-.00
3 INCH TO 3 FT	+ .50-.00	+.25-.25	+.25-.25	+.25-.25	
3 FT TO 10 FT	+1.00-.00				
10 FT AND OVER	+2.00-.00				

MIL 2084 9-65

SEE NOTE

LIST OF MATERIALS

NUMBER	ITEM	QTY	PART NO.	DESCRIPTION
	1	1	2014646-001	WIRE PER 1010789-016, 26 AWG, YEL, 5 FT TOT LG
	2	1	2014646-002	WIRE PER 1010789-008, 22 AWG, YEL, RED, 5 FT TOT LG
	3	1	2014646-003	WIRE PER 1010789-003, 24 AWG, YEL, RED, 10 FT TOT LG
	4	1	2014646-004	WIRE PER 1010789-009, 22 AWG, YEL, RED, GRN, 5 FT TOT LG
	5	1	2014646-005	WIRE PER 1010789-015, 26 AWG, YEL, RED, YEL JKT, 20 FT TOT LG
	6	1	2014646-006	WIRE PER 1010789-002, 24 AWG, BLK, 10 FT TOT LG
	7	1	2014746-011	CONNECTOR, PLUG, ELECTRICAL (56P28)
9	8	1	1010771-207	CONNECTOR, PLUG, ELECTRICAL (56P23)
9	9	X	1010770- 2	CONTACT, SOCKET, SUPPLIED WITH CONNECTOR 1010771
9	10	47	1010955- 1	CONTACT, MALE
9	11	17	1010955- 2	CONTACT, MALE
	12	1	2014670- 5	ADAPTOR, CONNECTOR
9	13	24	1010958- 1	PLUG, PROTECTIVE SEALING
9	14	10	1010402- 2	SLEEVE, SOLDER
~~9~~	15	~~1~~	~~1010811- 2~~	~~BAND, I.D.~~ DELETED
	16	AR	MIL-T-23594	TAPE, TEFLON, TYPE II, 1 INCH WIDE

SIZE	CODE IDENT NO.		
A	80230	2014646	
SCALE-NONE	REV LTR F	SHEET 5 OF 13	

MIL 2084 9-65

SEE NOTE

LIST OF MATERIALS

NUMBER	ITEM	QTY	PART NO.	DESCRIPTION
	17	AR	MIL-T-23594	TAPE, TEFLON, TYPE II, 1/4 INCH WIDE
9	18	AR	1012507-004	TAPE, LACING AND TYING
9	19	AR	1012503	COMPOUND, POTTING, POLYURETHANE
9	20	AR	1012504	PRIMER, METAL PARTS
9	21	AR	1010679	ADHESIVE ACTIVATOR
9	22	AR	1006277	SILICA, PULVERIZED, PYROGENIC
9	23	AR	1008822	COLORANT, EPOXY BASE
9	24	AR	1010661	EPOXY RESIN
9	25	6	1012534- 36	SLEEVING, ELECTRICAL (HEAT SHRINKABLE)

SIZE	CODE IDENT NO.		
A	80230	2014646	
SCALE-NONE	REV LTR E	SHEET 6 OF 13	

MIL 2084 9-65

LEAD IDENT	WIRE MATL ITEM	LEAD LG	CIRCUIT PT FROM (A) TO (B)	TERM.JKT AREA NO.	STRIP LG	SHLD STRIP LG	LEAD CUT LG	INS STRIP LG	TIN	NOTE ONE, FIG	ACCESSORY ITEMS	REMARKS
F	1	2										
F	1R		P23-24 P28-H6					.13 .18	NO NO		9 10	
F	1Y		P23-25 P28-K6					.13 .18	NO NO		9 10	
F	2	2										
F	2R		P23-21 P28-H7					.13 .18	NO NO		9 10	
F	2Y		P23-22 P28-K7					.13 .18	NO NO		9 10	
F	3	3										
F	3R		P23-30 P28-A5					.13 .18	NO NO		9 10	
F	3Y		P23-31 P28-A6					.13 .18	NO NO		9 10	
F	4	3										
F	4R		P23-27 P28-B5					.13 .18	NO NO		9 10	
F	4Y		P23-28 P28-B6					.13 .18	NO NO		9 10	

SIZE	CODE IDENT NO.		
A	80230	2014646	
SCALE-NONE	REV LTR E	SHEET 7 OF 13	

MIL 2084 9-65

LEAD IDENT	WIRE MATL ITEM	LEAD LG	CIRCUIT PT FROM (A) TO (B)	TERM.JKT AREA NO.	STRIP LG	SHLD STRIP LG	LEAD CUT LG	INS STRIP LG	TIN	NOTE ONE, FIG	ACCESSORY ITEMS	REMARKS
F	5	3										
F	5R		P23-53 P28-G8					.13 .18	NO NO		9 10	
F	5Y		P23-54 P28-F8					.13 .18	NO NO		9 10	
F	6	3										
F	6R		P23-56 P28-G9					.13 .18	NO NO		9 10	
F	6Y		P23-57 P28-F9					.13 .18	NO NO		9 10	
F	7	4										
F	7G		P23-6 P28-B7					.13 .18	NO NO		9 10	
F	7R		P23-5 P28-A7					.13 .18	NO NO		9 10	
F	7Y		P23-7 P28-B8					.13 .18	NO NO		9 10	
F	8	5			1.75 1.00	1.50 .75				6B 6B	14 14	
F	8A	6	SHLD F8 P23-37					.20 .13	NO NO		9	

SIZE	CODE IDENT NO.		
A	80230	2014646	
SCALE-NONE	REV LTR E	SHEET 8 OF 13	

MIL 2084 9-65

WIRING HARNESS F 2014646 E

LEAD IDENT	WIRE MATL ITEM	LEAD LG	CIRCUIT PT FROM (A) TO (B)	TERM.JKT AREA NO.	STRIP LG	SHLD STRIP LG	LEAD CUT LG	INS STRIP LG	TIN	NOTE ONE, FIG	ACCESSORY ITEMS	REMARKS
F	8B	6	P28-C8					.18	NO		10	
			SHLD F8					.20	NO		10	
F	8R		P23-38					.13	NO		9	
			P28-B9					.18	NO		11	
F	8Y		P23-39					.13	NO		9	
			P28-C9					.18	NO		11	
F	9	5			1.75	1.50				7	25	
					1.00	.75				6B	14	
F	9B	6	P28-G3					.18	NO		10	
			SHLD F9					.20	NO			
F	9R		P23-42					.13	NO		9	
			P28-G2					.18	NO		11	
F	9Y		P23-41					.13	NO		9	
			P28-G1					.18	NO		11	
F	10	5			1.75	1.50				7	25	
					1.00	.75				6B	14	
F	10B	6	P28-H3					.18	NO		10	
			SHLD F10					.20	NO			
F	10R		P23-44					.13	NO		9	
			P28-H1					.18	NO		11	
F	10Y		P23-45					.13	NO		9	
			P28-H2					.18	NO		11	
F	11	5			1.75	1.50				7	25	
					1.00	.75				6B	14	

SIZE	CODE IDENT NO.	
A	80230	2014646
SCALE-NONE	REV LTR E	SHEET 9 OF 13

MIL 2084 9-65

WIRING HARNESS F 2014646 E

LEAD IDENT	WIRE MATL ITEM	LEAD LG	CIRCUIT PT FROM (A) TO (B)	TERM.JKT AREA NO.	STRIP LG	SHLD STRIP LG	LEAD CUT LG	INS STRIP LG	TIN	NOTE ONE, FIG	ACCESSORY ITEMS	REMARKS
F	11B	6	P28-D7					.18	NO		10	
			SHLD F11					.20	NO		10	
F	11R		P23-50					.13	NO		9	
			P28-D8					.18	NO		11	
F	11Y		P23-51					.13	NO		9	
			P28-D9					.18	NO		11	
F	12	4										
F	12G		P23-3					.13	NO		9	
			P28-B4					.18	NO		10	
F	12R		P23-2					.13	NO		9	
			P28-A4					.18	NO		10	
F	12Y		P23-1					.13	NO		9	
			P28-A3					.18	NO		10	
F	13	5			1.75	1.50				68	14	
					1.00	.75				68	14	
F	13A	6	SHLD F13					.20	NO			
			P23-35					.13	NO		9	
F	13B	6	P28-B3					.18	NO		10	
			SHLD F13					.20	NO			
F	13R		P23-33					.13	NO		9	
			P28-B1					.18	NO		11	
F	13Y		P23-34					.13	NO		9	
			P28-B2					.18	NO		11	

SIZE	CODE IDENT NO.	
A	80230	2014646
SCALE-NONE	REV LTR E	SHEET 10 OF 13

MIL 2084 9-65

WIRING HARNESS F 2014646 E

LEAD IDENT	WIRE MATL ITEM	LEAD LG	CIRCUIT PT FROM (A) TO (B)	TERM.JKT AREA NO.	STRIP LG	SHLD STRIP LG	LEAD CUT LG	INS STRIP LG	TIN	NOTE ONE, FIG	ACCESSORY ITEMS	REMARKS
F	14	5			1.75	1.50				7	25	
					1.00	.75				6B	14	
F	14B	6	P28-F3					.18	NO		10	
			SHLD F14					.20	NO			
F	14R		P23-9					.13	NO		9	
			P28-F2					.18	NO		11	
F	14Y		P23-10					.13	NO		9	
			P28-F1					.18	NO		11	
F	15	5			1.75	1.50				7	25	
					1.00	.75				6B	14	
F	15B	6	P28-D3					.18	NO		10	
			SHLD F15					.20	NO			
F	15R		P23-12					.13	NO		9	
			P28-D1					.18	NO		11	
F	15Y		P23-13					.13	NO		9	
			P28-D2					.18	NO		11	
F	16	5			1.75	1.50				7	25	
					1.00	.75				6B	14	
F	16B	6	P28-C3					.18	NO		10	
			SHLD F16					.20	NO			
F	16R		P23-18					.13	NO		9	
			P28-C2					.18	NO		11	
F	16Y		P23-19					.13	NO		9	
			P28-C1					.18	NO		11	

SIZE	CODE IDENT NO.	
A	80230	2014646
SCALE-NONE	REV LTR E	SHEET 11 OF 13

MIL 2084 9-65

WIRING HARNESS F 2014646 E

LEAD IDENT	WIRE MATL ITEM	LEAD LG	CIRCUIT PT FROM (A) TO (B)	TERM.JKT AREA NO.	STRIP LG	SHLD STRIP LG	LEAD CUT LG	INS STRIP LG	TIN	NOTE ONE, FIG	ACCESSORY ITEMS	REMARKS
F	17	1	P23-59					.13	NO		9	
			P28-K3					.18	NO		11	

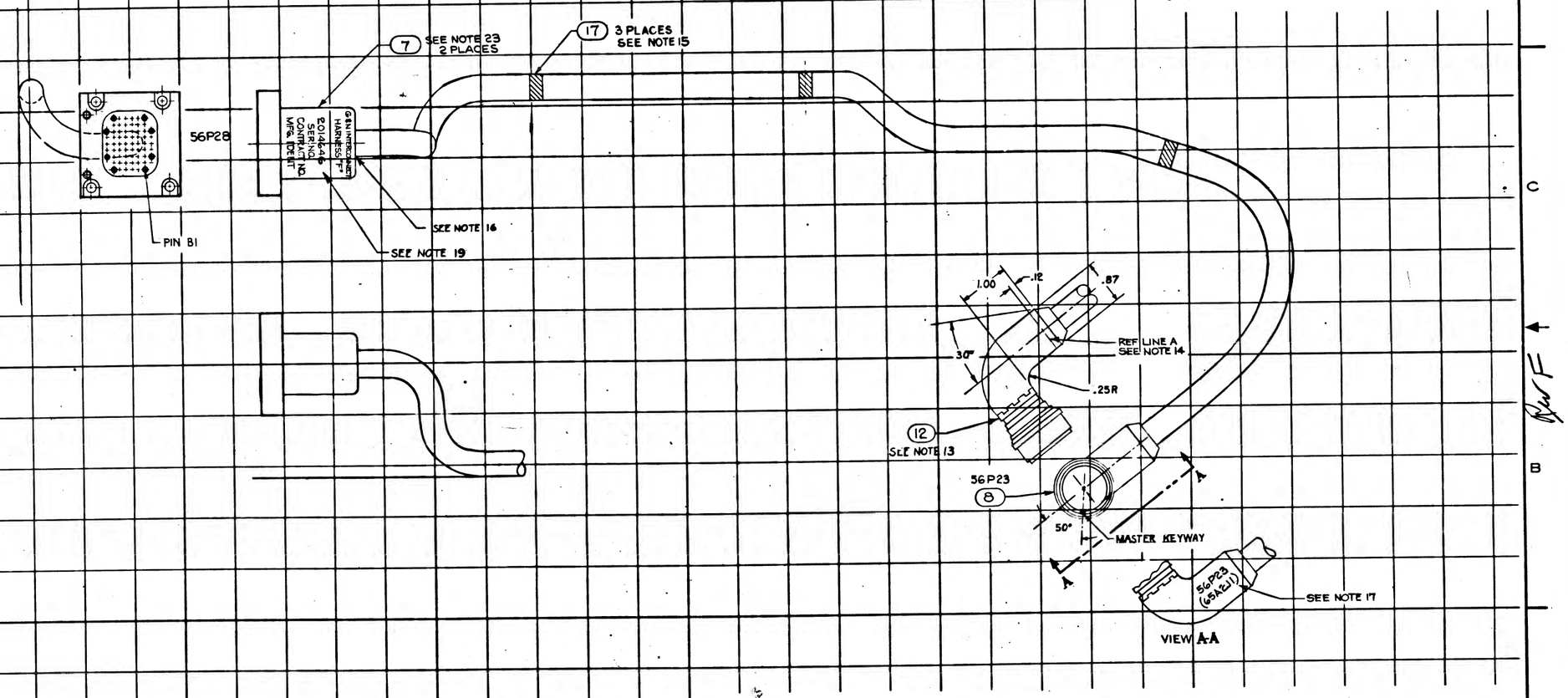
SIZE	CODE IDENT NO.	
A	80230	2014646
SCALE-NONE	REV LTR E	SHEET 12 OF 13

MIL 2084 9-65

2014646 F

REVISIONS Rev F TDRR #48

SYM	ZONE	DESCRIPTION	CHG NO.	DATE	APPD
		SEE SHEET 1 FOR REVISION RECORD			



2014567 NEXT ASSY	USED ON	UNLESS OTHERWISE SPECIFIED DIMENSIONS ARE IN INCHES TOLERANCES ON FRACTIONS ± DECIMALS 2 PLACE ±.03 ANGLES ±5°	MIT INSTRUMENTATION LAB CAMBRIDGE, MASS.	MANNED SPACECRAFT CENTER HOUSTON, TEXAS
APPLICATION		DO NOT SCALE THIS DRAWING	DRAWN Ruby Peters DATE 12-16-63	G&N INTERCONNECT HARNESS "F" (CM, BLOCK II)
		MATERIAL	CHECKED R. E. Abrahamson	
			APPROVAL Paul Nelson DEC 16, 63	
			APPROVAL	
		CONTRACT	NASA APPROVAL A. C. MILLIGAN	CODE IDENT NO. 80230 / SIZE D / 2014646
			MIT APPROVAL	SCALE 1:1 / SHEET 13 OF 13

MIL 1077D-F

NOTE NUMBER	GENERAL NOTES DESCRIPTION
1	SHIELD TERMINATION FIGURES ARE PER ND1002071 FOR FIGURE 6B AND ND 1002032 FOR FIGURE 7.
2	INTERPRET DRAWING IN ACCORDANCE WITH STANDARDS PRESCRIBED BY MIL-D-70327.
3	INTERCONNECT LIST FOR THIS HARNESS IS 2014676.
4	PARTIAL CIRCUIT POINTS ARE SHOWN. PREFIX WITH UNIT NUMBER 56 FOR COMPLETE CIRCUIT POINT
5	THE SUFFIX LETTER OF A CONDUCTOR IDENTIFICATION NUMBER IDENTIFIES A SHIELD LEAD, COLOR, OR MARKED LETTER. A - FROM END OF SHIELD B - TO END OF SHIELD G - GREEN K - BLACK L - BLUE N - BROWN R - RED W - WHITE Y - YELLOW
6	ASTERISK DENOTES LOWER CASE LETTER
7	GRID MODULE ON PICTURE SHEET IS 1 INCH TRUE POSITION
8	UNLESS OTHERWISE SPECIFIED FEATURE CENTERLINES ON PICTURE SHEET ARE LOCATED WITHIN + OR - .25. ENDS OF HOOKUP WIRES OR ACCESSORIES ARE LOCATED WITHIN .12.
9	VENDOR ITEM - SEE SOURCE CONTROL OR SPECIFICATION CONTROL DRAWING.
10	CRIMP CONTACTS PER ND1002032.

SIZE	CODE IDENT NO.	
A	80230	2014646
SCALE-NONE	REV LTR E	SHEET 2 OF 13

MIL 2084 9-65

NOTE NUMBER	GENERAL NOTES DESCRIPTION
11	ALL UNUSED ~~CONNECTOR HOLES~~ CONTACT CAVITIES SHALL BE FILLED WITH A CONTACT OR CONTACT AND SEALING PLUG AS FOLLOWS CONNECTOR 56P23, USE ITEM NUMBERS 9 AND 13. CONNECTOR 56P28, USE ITEM NUMBER 10.
12	LACE HARNESS PER ND1002032 USING ITEM NUMBER 18.
13	A SMALL QUANTITY OF POTTING COMPOUND MUST BE PUT BETWEEN THE THREADED PORTION OF CONNECTOR AND SILICONE RUBBER GROMMET TO SEAL AND BOND RING TO CONNECTOR PRIOR TO POTTING.
14	ALL SHIELDED TERMINATIONS SHALL BE LOCATED BELOW REFERENCE LINE A. THERE SHALL BE NO EXPOSED CONDUCTORS AT THE SURFACE OF THE POTTING COMPOUND.
15	BEFORE LACING HARNESS, APPLY 2 TURNS OF TAPE, TO INDICATE CABLE CLAMP LOCATION.
16	WRAP TAPE AROUND HARNESS IN AREA SHOWN AS REQUIRED TO BUILD UP DIAMETER TO FIT ~~CABLE CLAMP.~~ SHELL HOLE.
17	MARK CONNECTOR WITH REFERENCE DESIGNATION AS SHOWN .12 HIGH, BLACK, HOT IMPRESSION STAMPING PER ND1002019, CENTRALIZE.
19	MARK CHARACTERS .12 HIGH, BLACK, PER ND1002019, SERIALIZE PER ND1002023.
20	CONTINUITY TEST PER CONDUCTOR CHART. RESISTANCE SHALL BE LESS THAN 1/2 OHM. TEST PER MIL-STD-202, METHOD 303.

SIZE	CODE IDENT NO.	
A	80230	2014646
SCALE-NONE	REV LTR E	SHEET [illegible]

NOTE NUMBER	GENERAL NOTES DESCRIPTION
21	INSULATION RESISTANCE SHALL BE GREATER THAN 100 MEGOHMS WITH 500 VDC APPLIED BETWEEN A. THE ASSEMBLY PINS AND STRUCTURE GROUND, EXCEPT THOSE PINS ELECTRICALLY CONNECTED TO STRUCTURE GROUND. B. EACH PIN AND ALL OTHER PINS NOT ELECTRICALLY CONNECTED, INCLUDING ALL SPARE PINS. TEST PER MIL-STD-202 METHOD 302 EXCEPT ELECTRIFICATION TIME NOT APPLICABLE.
22	PRESEAL BACK OF CONNECTOR P28 PRIOR TO ENCAPSULATION PER ND1002187 TYPE III USING ITEMS 21,22,23, AND 24.
23	ENCAPSULATE BACK OF CONNECTORS ~~[illegible]~~ PER ND1002236 USING ITEMS 19 AND 20.

LEAD TOLERANCE CHART

	LEAD LG	JKT STRIP LG	SHIELD STRIP LG	LEAD CUT LG	INS STRIP LG
UNDER 3 INCHES	+ .12-.00	+.06-.06	+.06-.06	+.06-.06	+.06-.00
3 INCH TO 3 FT	+ .50-.00	+.25-.25	+.25-.25	+.25-.25	
3 FT TO 10 FT	+1.00-.00				
10 FT AND OVER	+2.00-.00				

24 Perform Workmanship Vibration:

A. Sinusoidal sweep at 3.5 g rms. Limited to 0.3 inch peak to peak displacement, from 10 to 2000 cps at a rate of 4 octaves per minute.

B. Vibration along the X axis of the space craft.

C. Monitor for discontinuities of 10μ seconds or greater during vibration.

D. Complete continuity and insulation resistance testing must be accomplished after vibration.

SIZE	CODE IDENT NO.	
A	80230	2014646
SCALE-NONE	REV LTR G	SHEET 4 OF 13

MIL 2084 9-65

REPLACES REV D WITH CHANGE

REVISIONS

SYM	DESCRIPTION	DATE	APPROVAL
E	REPLACES REV D WITH CHANGED PER TDRR		
F	ADD CONFIGURATION AND CHANGES PER TDRR 24811		
G	Revised per TDRR 25306	2/4/66	[illegible]

APPLICATION

NEXT ASSY	USED ON
2014567-011	2014567-011

REV													
SHEET													
REV STATUS					G	E	F	G	E	E	E	E	F
OF SHEETS	SHEET	1	2	3	4	5	6	7	8	9	10	11	12	13

MIT INSTRUMENTATION LAB CAMBRIDGE, MASS.

MANNED SPACECRAFT CENTER HOUSTON, TEXAS

G & N INTERCONNECT HARNESS "F" (C/M, BLOCK II)

DWG NO. 2014646

CODE IDENT NO. 80230 SIZE A REV G

SCALE F SHEET 1 OF 13

DRAWN [illegible] 7 DEC 65

CHECKED [illegible] 7 DEC 65

APPROVAL [illegible] 8 DEC 65

APPROVAL [illegible] 13 DEC 65

NASA APPROVAL A. C. METZGER

MIT APPROVAL [illegible] 14 DEC 1965

CONTRACT NAS9-497

SEE NOTE

LIST OF MATERIALS

NUMBER	ITEM	QTY	PART NO.	DESCRIPTION
	17	AR	MIL-T-23594	TAPE, TEFLON, TYPE II, 1/4 INCH WIDE
9	18	AR	1012507-004	TAPE, LACING AND TYING
9	19	AR	1012503	COMPOUND, POTTING, POLYURETHANE
9	20	AR	1012504	PRIMER, METAL PARTS
9	21	AR	1010679	ADHESIVE ACTIVATOR
9	22	AR	1006277	SILICA, PULVERIZED, PYROGENIC
9	23	AR	1008822	COLORANT, EPOXY BASE
9	24	AR	1010661	EPOXY RESIN
9	25	6	1012534- 36	SLEEVING, ELECTRICAL (HEAT SHRINKABLE)

SIZE	CODE IDENT NO.	
A	80230	2014646
SCALE-NONE	REV LTR E	SHEET 6 OF 13

MIL 2084 9-65

LEAD IDENT	WIRE MATL ITEM	LEAD LG	CIRCUIT PT FROM (A) TO (B)	TERM.JKT AREA NO.	STRIP LG	SHLD STRIP LG	LEAD CUT LG	INS STRIP LG	TIN	NOTE ONE, FIG	ACCESSORY ITEMS	REMARKS
F	1	2										
F	1R		P23-24					.13	NO		9	
			P28-H6					.18	NO		10	
F	1Y		P23-25					.13	NO		9	
			P28-K6					.18	NO		10	
F	2	2										
F	2R		P23-21					.13	NO		9	
			P28-H7					.18	NO		10	
F	2Y		P23-22					.13	NO		9	
			P28-K7					.18	NO		10	
F	3	3										
F	3R		P23-30					.13	NO		9	
			P28-A5					.18	NO		10	
F	3Y		P23-31					.13	NO		9	
			P28-A6					.18	NO		10	
F	4	3										
F	4R		P23-27					.13	NO		9	
			P28-B5					.18	NO		10	
F	4Y		P23-28					.13	NO		9	
			P28-B6					.18	NO		10	

SIZE	CODE IDENT NO.	
A	80230	2014646
SCALE-NONE	REV LTR E	SHEET 7 OF 13

MIL 2084 9-65

SEE NOTE

LIST OF MATERIALS

NUMBER	ITEM	QTY	PART NO.	DESCRIPTION
	1	1	2014646-001	WIRE PER 1010789-016, 26 AWG, YEL, 5 FT TOT LG
	2	1	2014646-002	WIRE PER 1010789-008, 22 AWG, YEL, RED, 5 FT TOT LG
	3	1	2014646-003	WIRE PER 1010789-003, 24 AWG, YEL, RED, 10 FT TOT LG
	4	1	2014646-004	WIRE PER 1010789-009, 22 AWG, YEL, RED, GRN, 5 FT TOT LG
	5	1	2014646-005	WIRE PER 1010789-015, 26 AWG, YEL, RED, YEL JKT, 20 FT TOT LG
	6	1	2014646-006	WIRE PER 1010789-002, 24 AWG, BLK, 10 FT TOT LG
	7	1	2014746-011	CONNECTOR, PLUG, ELECTRICAL (56P28)
9	8	1	1010771-207	CONNECTOR, PLUG, ELECTRICAL (56P23)
9	9	X	1010770- 2	CONTACT, SOCKET, SUPPLIED WITH CONNECTOR 1010771
9	10	47	1010955- 1	CONTACT, MALE
9	11	17	1010955- 2	CONTACT, MALE
	12	1	2014670- 5	ADAPTOR, CONNECTOR
9	13	24	1010958- 1	PLUG, PROTECTIVE SEALING
9	14	10	1010402- 2	SLEEVE, SOLDER
~~9~~	15	~~1~~	~~1010811- 2~~	~~BAND, I.D.~~ DELETED
	16	AR	MIL-T-23594	TAPE, TEFLON, TYPE II, 1 INCH WIDE

SIZE	CODE IDENT NO.	
A	80230	2014646
SCALE-NONE	REV LTR F	SHEET 5 OF 13

MIL 2084 9-65

LEAD IDENT	WIRE MATL ITEM	LEAD LG	CIRCUIT PT FROM (A) TO (B)	TERM.JKT AREA NO.	STRIP LG	SHLD STRIP LG	LEAD CUT LG	INS STRIP LG	TIN	NOTE ONE, FIG	ACCESSORY ITEMS	REMARKS
F	5	3										
F	5R		P23-53					.13	NO		9	
			P28-G8					.18	NO		10	
F	5Y		P23-54					.13	NO		9	
			P28-F8					.18	NO		10	
F	6	3										
F	6R		P23-56					.13	NO		9	
			P28-G9					.18	NO		10	
F	6Y		P23-57					.13	NO		9	
			P28-F9					.18	NO		10	
F	7	4										
F	7G		P23-6					.13	NO		9	
			P28-B7					.18	NO		10	
F	7R		P23-5					.13	NO		9	
			P28-A7					.18	NO		10	
F	7Y		P23-7					.13	NO		9	
			P28-B8					.18	NO		10	
F	8	5			1.75	1.50				6B	14	
					1.00	.75				6B	14	
F	8A	6	SHLD F8					.20	NO			
			P23-37					.13	NO		9	

SIZE	CODE IDENT NO.	
A	80230	2014646
SCALE-NONE	REV LTR E	SHEET 8 OF 13

MIL 2084 9-65

WIRING HARNESS F — 2014646 — E

LEAD IDENT	WIRE MATL ITEM	LEAD LG	CIRCUIT PT FROM (A) TO (B)	TERM.JKT AREA NO.	STRIP LG	SHLD STRIP LG	LEAD CUT LG	INS STRIP LG	TIN	NOTE ONE, FIG	ACCESSORY ITEMS	REMARKS
F 11B	6		P28-D7					.18	NO		10	
			SHLD F11					.20	NO		10	
F 11R			P23-50					.13	NO		9	
			P28-D8					.18	NO		11	
F 11Y			P23-51					.13	NO		9	
			P28-D9					.18	NO		11	
F 12	4											
F 12G			P23-3					.13	NO		9	
			P28-B4					.18	NO		10	
F 12R			P23-2					.13	NO		9	
			P28-A4					.18	NO		10	
F 12Y			P23-1					.13	NO		9	
			P28-A3					.18	NO		10	
F 13	5				1.75	1.50				6B	14	
					1.00	.75				6B	14	
F 13A	6		SHLD F13					.20	NO			
			P23-35					.13	NO		9	
F 13B	6		P28-B3					.18	NO		10	
			SHLD F13					.20	NO			
F 13R			P23-33					.13	NO		9	
			P28-B1					.18	NO		11	
F 13Y			P23-34					.13	NO		9	
			P28-B2					.18	NO		11	

SIZE	CODE IDENT NO.	
A	80230	2014646
SCALE-NONE	REV LTR E	SHEET 10 OF 13

MIL 2064 9-65

WIRING HARNESS F — 2014646 — E

LEAD IDENT	WIRE MATL ITEM	LEAD LG	CIRCUIT PT FROM (A) TO (B)	TERM.JKT AREA NO.	STRIP LG	SHLD STRIP LG	LEAD CUT LG	INS STRIP LG	TIN	NOTE ONE, FIG	ACCESSORY ITEMS	REMARKS
F 14	5				1.75	1.50				7	25	
					1.00	.75				6B	14	
F 14B	6		P28-F3					.18	NO		10	
			SHLD F14					.20	NO			
F 14R			P23-9					.13	NO		9	
			P28-F2					.18	NO		11	
F 14Y			P23-10					.13	NO		9	
			P28-F1					.18	NO		11	
F 15	5				1.75	1.50				7	25	
					1.00	.75				6B	14	
F 15B	6		P28-D3					.18	NO		10	
			SHLD F15					.20	NO			
F 15R			P23-12					.13	NO		9	
			P28-D1					.18	NO		11	
F 15Y			P23-13					.13	NO		9	
			P28-D2					.18	NO		11	
F 16	5				1.75	1.50				7	25	
					1.00	.75				6B	14	
F 16B	6		P28-C3					.18	NO		10	
			SHLD F16					.20	NO			
F 16R			P23-18					.13	NO		9	
			P28-C2					.18	NO		11	
F 16Y			P23-19					.13	NO		9	
			P28-C1					.18	NO		11	

SIZE	CODE IDENT NO.	
A	80230	2014646
SCALE-NONE	REV LTR E	SHEET 11 OF 13

MIL 2064 9-65

WIRING HARNESS F — 2014646 — E

LEAD IDENT	WIRE MATL ITEM	LEAD LG	CIRCUIT PT FROM (A) TO (B)	TERM.JKT AREA NO.	STRIP LG	SHLD STRIP LG	LEAD CUT LG	INS STRIP LG	TIN	NOTE ONE, FIG	ACCESSORY ITEMS	REMARKS
F 8B	6		P28-C8					.18	NO		10	
			SHLD F8					.20	NO		10	
F 8R			P23-38					.13	NO		9	
			P28-B9					.18	NO		11	
F 8Y			P23-39					.13	NO		9	
			P28-C9					.18	NO		11	
F 9	5				1.75	1.50				7	25	
					1.00	.75				6B	14	
F 9B	6		P28-G3					.18	NO		10	
			SHLD F9					.20	NO			
F 9R			P23-42					.13	NO		9	
			P28-G2					.18	NO		11	
F 9Y			P23-41					.13	NO		9	
			P28-G1					.18	NO		11	
F 10	5				1.75	1.50				7	25	
					1.00	.75				6B	14	
F 10B	6		P28-H3					.18	NO		10	
			SHLD F10					.20	NO			
F 10R			P23-44					.13	NO		9	
			P28-H1					.18	NO		11	
F 10Y			P23-45					.13	NO		9	
			P28-H2					.18	NO		11	
F 11	5				1.75	1.50				7	25	
					1.00	.75				6B	14	

SIZE	CODE IDENT NO.	
A	80230	2014646
SCALE-NONE	REV LTR E	SHEET 9 OF 13

MIL 2064 9-65

WIRING HARNESS F — 2014646 — E

LEAD IDENT	WIRE MATL ITEM	LEAD LG	CIRCUIT PT FROM (A) TO (B)	TERM.JKT AREA NO.	STRIP LG	SHLD STRIP LG	LEAD CUT LG	INS STRIP LG	TIN	NOTE ONE, FIG	ACCESSORY ITEMS	REMARKS
F 17	1		P23-59					.13	NO		9	
			P28-K3					.18	NO		11	

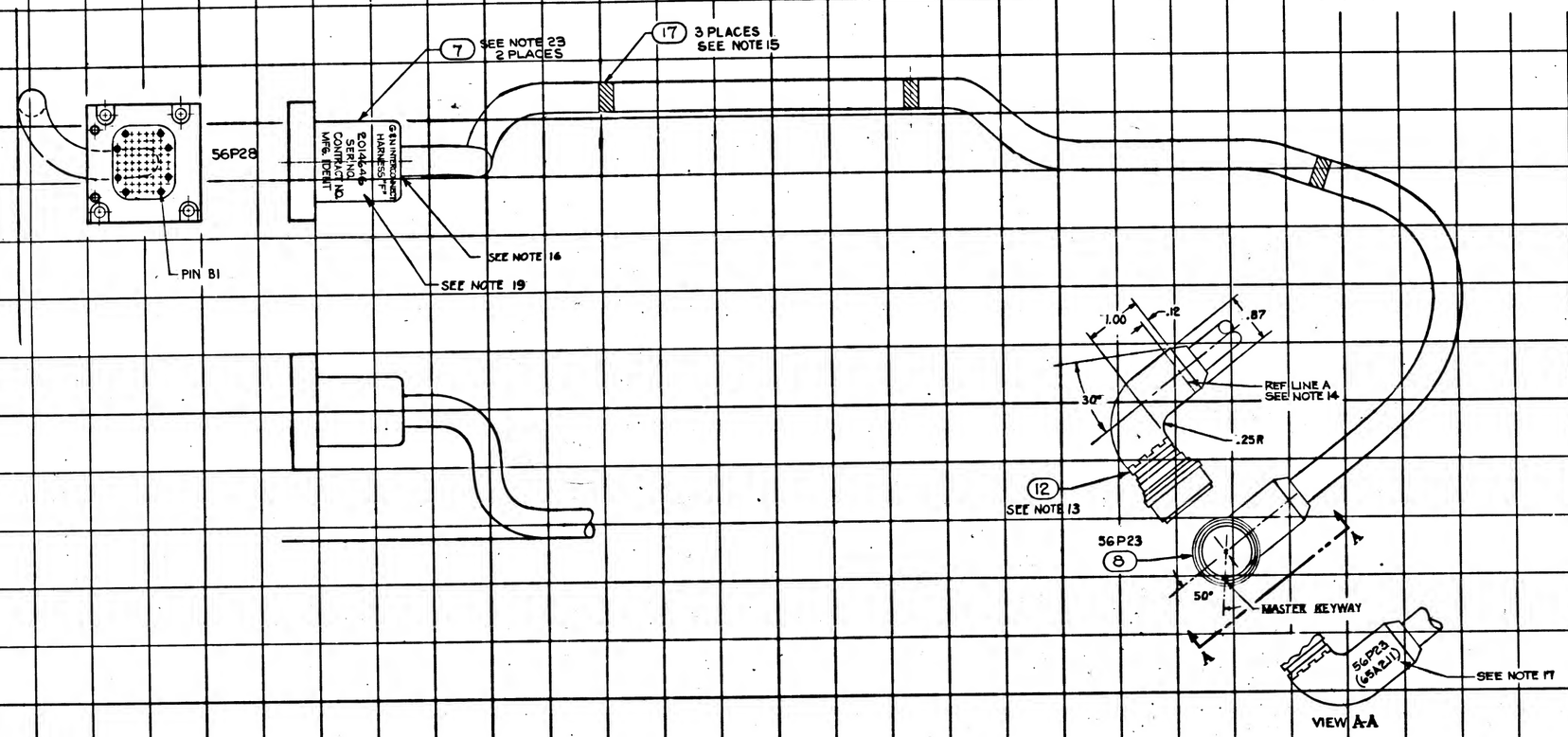
SIZE	CODE IDENT NO.	
A	80230	2014646
SCALE-NONE	REV LTR E	SHEET 12 OF 13

MIL 2064 9-65

2014646 F

REVISIONS REV F TDRR 24811

SYM	ZONE	DESCRIPTION	CHG NO.	DATE	APPD
		SEE SHEET 1 FOR REVISION RECORD			



2014567		UNLESS OTHERWISE SPECIFIED DIMENSIONS ARE IN INCHES TOLERANCES ON FRACTIONS ± DECIMALS 3 PLACE ±.03 ANGLES ±5°	MIT INSTRUMENTATION LAB CAMBRIDGE, MASS.	MANNED SPACECRAFT CENTER HOUSTON, TEXAS
NEXT ASSY	USED ON	DO NOT SCALE THIS DRAWING	DRAWN Cindy Estes DATE 12-7-63	G&N INTERCONNECT HARNESS "F" (CM, BLOCK II)
APPLICATION		MATERIAL	CHECKED N. P. Abrahamson	
		CONTRACT	APPROVAL Paul Watson DEC 16, 65	
			APPROVAL	CODE IDENT NO. 80230 / SIZE D / 2014646
			A. C. METCALFE NASA APPROVAL	SCALE 1:1 / SHEET 13 OF 13
			MIT APPROVAL	

APPLICATION		REVISIONS			
NEXT ASSY	USED ON	SYM	DESCRIPTION	DATE	APPROVAL
2014567-011	2014567-011	E	REPLACES REV D WITH CHANGED PER TDRR		
		F	ADD CONFIGURATION AND CHANGES PER TDRR 24811		
	(M)	G	Revised per TDRR 25306	2/4/66	Gleyzer
		H	REVISED PER TDRR 28841	20 MAY 66	

REPLACES REV D WITH CHANGE

REV																									
SHEET																									
REV STATUS	REV				H	G	H	H	G	G	G	G	G	G	G	G	G	H							
OF SHEETS	SHEET				1	2	3	4	5	6	7	8	9	10	11	12	13	14							

MIT INSTRUMENTATION LAB
CAMBRIDGE, MASS.
DWG NO. CONTRACT

MANNED
SPACECRAFT CENTER
HOUSTON, TEXAS

DRAWN Janowiak DATE 7 DEC 65
CHECKED W. Diehl 7 DEC 65
APPROVAL D. Klinge 8 DEC 65
APPROVAL J. Kenna 12/20/65

G & N INTERCONNECT HARNESS "F"
(C/M, BLOCK II)

NASA APPROVAL A. L. Mercer
MIT APPROVAL

CODE IDENT NO.	SIZE		REV
80230	A	2014646	H

CONTRACT NAS9-497 | SCALE F | SHEET 1 OF 14

NOTE NUMBER	GENERAL NOTES DESCRIPTION
1	SHIELD TERMINATION FIGURES ARE PER ND1002071 FOR FIGURE 6B AND ND 1002032 FOR FIGURE 7.
2	INTERPRET DRAWING IN ACCORDANCE WITH STANDARDS PRESCRIBED BY MIL-D-70327.
3	INTERCONNECT LIST FOR THIS HARNESS IS 2014676.
4	PARTIAL CIRCUIT POINTS ARE SHOWN. PREFIX WITH UNIT NUMBER 56 FOR COMPLETE CIRCUIT POINT
5	THE SUFFIX LETTER OF A CONDUCTOR IDENTIFICATION NUMBER IDENTIFIES A SHIELD LEAD, COLOR, OR MARKED LETTER. A - FROM END OF SHIELD B - TO END OF SHIELD G - GREEN K - BLACK L - BLUE N - BROWN R - RED W - WHITE Y - YELLOW
6	ASTERISK DENOTES LOWER CASE LETTER
7	GRID MODULE ON PICTURE SHEET IS 1 INCH TRUE POSITION
8	UNLESS OTHERWISE SPECIFIED FEATURE CENTERLINES ON PICTURE SHEET ARE LOCATED WITHIN + OR - .25. ENDS OF HOOKUP WIRES OR ACCESSORIES ARE LOCATED WITHIN .12.
9	VENDOR ITEM - SEE SOURCE CONTROL OR SPECIFICATION CONTROL DRAWING.
10	CRIMP CONTACTS PER ND1002032.

NOTE NUMBER	GENERAL NOTES DESCRIPTION
11	ALL UNUSED CONTACT CAVITIES SHALL BE FILLED WITH A CONTACT OR CONTACT AND SEALING PLUG AS FOLLOWS CONNECTOR 56P23, USE ITEM NUMBERS 9 AND 13. CONNECTOR 56P28, USE ITEM NUMBER 10.
12	LACE HARNESS PER ND1002032 USING ITEM NUMBER 18.
13	APPLY BONDING MATERIAL PER ND1002187, TYPE I, USING ITEMS 21 AND 24. TO THE THREADED PORTION OF CONNECTOR AND TO THE THREADED PORTION OF ADAPTER PRIOR TO ASSEMBLY.
14	ALL SHIELDED TERMINATIONS SHALL BE LOCATED BELOW REFERENCE LINE A. THERE SHALL BE NO EXPOSED CONDUCTORS OR ACCESSORIES AT THE SURFACE OF THE POTTING COMPOUND.
15	BEFORE LACING HARNESS, APPLY 2 TURNS OF TAPE, TO INDICATE CABLE CLAMP LOCATION.
16	WRAP TAPE AROUND HARNESS IN AREA SHOWN AS REQUIRED TO BUILD UP DIAMETER TO FIT SHELL HOLE.
17	MARK CONNECTOR WITH REFERENCE DESIGNATION AS SHOWN .12 HIGH, BLACK, PER ND1002019, CENTRALIZE.
19	MARK CHARACTERS .12 HIGH, BLACK, PER ND1002019, SERIALIZE PER ND1002023.
20	CONTINUITY TEST PER CONDUCTOR CHART. RESISTANCE SHALL BE LESS THAN 1/2 OHM. TEST PER MIL-STD-202, METHOD 303.

NOTE NUMBER	GENERAL NOTES DESCRIPTION
21	INSULATION RESISTANCE SHALL BE GREATER THAN 100 MEGOHMS WITH 500 VDC APPLIED BETWEEN A. THE ASSEMBLY PINS AND STRUCTURE GROUND, EXCEPT THOSE PINS ELECTRICALLY CONNECTED TO STRUCTURE GROUND. B. EACH PIN AND ALL OTHER PINS NOT ELECTRICALLY CONNECTED, INCLUDING ALL SPARE PINS. TEST PER MIL-STD-202 METHOD 302 EXCEPT ELECTRIFICATION TIME NOT APPLICABLE. SHORT CIRCUIT CURRENT SHALL BE LIMITED TO 15 MA.
22	PRESEAL BACK OF CONNECTOR P28 PRIOR TO ENCAPSULATION PER ND1002187 TYPE III USING ITEMS 21,22,23, AND 24.
23	ENCAPSULATE BACK OF CONNECTORS PER ND1002236 USING ITEMS 19 AND 20.
24	PERFORM WORKMANSHIP VIBRATION A. SINUSOIDAL SWEEP AT 3.5 G RMS. LIMITED TO 0.3 INCH PEAK TO PEAK DISPLACEMENT, FROM 10 TO 2000 CPS AT A RATE OF 4 OCTAVES PER MINUTE. B. VIBRATION ALONG THE X AXIS OF THE SPACE CRAFT. C. MONITOR FOR DISCONTINUITIES OF 10 MICRO SECONDS OR GREATER DURING VIBRATION. D. COMPLETE CONTINUITY AND INSULATION RESISTANCE TESTING MUST BE ACCOMPLISHED AFTER VIBRATION.

NOTE NUMBER — GENERAL NOTES DESCRIPTION

LEAD TOLERANCE CHART

	LEAD LG	JKT STRIP LG	SHIELD STRIP LG	LEAD CUT LG	INS STRIP LG
UNDER 3 INCHES	+ .12-.00	+.06-.06	+.06-.06	+.06-.06	+.06-.00
3 INCH TO 3 FT	+ .50-.00	+.25-.25	+.25-.25	+.25-.25	
3 FT TO 10 FT	+1.00-.00				
10 FT AND OVER	+2.00-.00				

SEE NOTE

LIST OF MATERIALS

NUMBER	ITEM	QTY	PART NO.	DESCRIPTION
	1	1	2014646-001	WIRE PER 1010789-016, 26 AWG, YEL, 5 FT TOT LG
	2	1	2014646-002	WIRE PER 1010789-008, 22 AWG, YEL, RED, 5 FT TOT LG
	3	1	2014646-003	WIRE PER 1010789-003, 24 AWG, YEL, RED, 10 FT TOT LG
	4	1	2014646-004	WIRE PER 1010789-009, 22 AWG, YEL, RED, GRN, 5 FT TOT LG
	5	1	2014646-005	WIRE PER 1010789-015, 26 AWG, YEL, RED, YEL JKT, 20 FT TOT LG
	6	1	2014646-006	WIRE PER 1010789-002, 24 AWG, BLK, 10 FT TOT LG
	7	1	2014746-011	CONNECTOR, PLUG, ELECTRICAL (56P28)
9	8	1	1010771-207	CONNECTOR, PLUG, ELECTRICAL (56P23)
9	9	X	1010770- 2	CONTACT, SOCKET, SUPPLIED WITH CONNECTOR 1010771
9	10	47	1010955- 1	CONTACT, MALE
9	11	17	1010955- 2	CONTACT, MALE
	12	1	2014670- 5	ADAPTOR, CONNECTOR
9	13	24	1010958- 1	PLUG, PROTECTIVE SEALING
9	14	10	1010402- 2	SLEEVE, SOLDER
	15		1010811- 2	DELETED
	16	AR	MIL-T-23594	TAPE, TEFLON, TYPE II, 1 INCH WIDE

SIZE	CODE IDENT NO.	
A	80230	2014646
SCALE-NONE	REV LTR G	SHEET 6 OF 14

MIL 2084 9-85

SEE NOTE

LIST OF MATERIALS

NUMBER	ITEM	QTY	PART NO.	DESCRIPTION
	17	AR	MIL-T-23594	TAPE, TEFLON, TYPE II, 1/4 INCH WIDE
9	18	AR	1012507-004	TAPE, LACING AND TYING
9	19	AR	1012503	COMPOUND, POTTING, POLYURETHANE
9	20	AR	1012504	PRIMER, METAL PARTS
9	21	AR	1010679	ADHESIVE ACTIVATOR
9	22	AR	1006277	SILICA, PULVERIZED, PYROGENIC
9	23	AR	1008822	COLORANT, EPOXY BASE
9	24	AR	1010661	EPOXY RESIN
9	25	6	1012534- 36	SLEEVING, ELECTRICAL (HEAT SHRINKABLE)

SIZE	CODE IDENT NO.	
A	80230	2014646
SCALE-NONE	REV LTR G	SHEET 7 OF 14

MIL 2084 9-85

LEAD IDENT	WIRE MATL ITEM	LEAD LG	CIRCUIT PT FROM (A) TO (B)	TERM. AREA NO.	JKT STRIP LG	SHLD STRIP LG	LEAD CUT LG	INS STRIP LG	TIN	NOTE ONE, FIG	ACCESSORY ITEMS	REMARKS
F	1	2										
F	1R		P23-24					.13	NO		9	
			P28-H6					.18	NO		10	
F	1Y		P23-25					.13	NO		9	
			P28-K6					.18	NO		10	
F	2	2										
F	2R		P23-21					.13	NO		9	
			P28-H7					.18	NO		10	
F	2Y		P23-22					.13	NO		9	
			P28-K7					.18	NO		10	
F	3	3										
F	3R		P23-30					.13	NO		9	
			P28-A5					.18	NO		10	
F	3Y		P23-31					.13	NO		9	
			P28-A6					.18	NO		10	
F	4	3										
F	4R		P23-27					.13	NO		9	
			P28-B5					.18	NO		10	
F	4Y		P23-28					.13	NO		9	
			P28-B6					.18	NO		10	

SIZE	CODE IDENT NO.	
A	80230	2014646
SCALE-NONE	REV LTR G	SHEET 8 OF 14

MIL 2084 9-85

LEAD IDENT	WIRE MATL ITEM	LEAD LG	CIRCUIT PT FROM (A) TO (B)	TERM. AREA NO.	JKT STRIP LG	SHLD STRIP LG	LEAD CUT LG	INS STRIP LG	TIN	NOTE ONE, FIG	ACCESSORY ITEMS	REMARKS
F	5	3										
F	5R		P23-53					.13	NO		9	
			P28-G8					.18	NO		10	
F	5Y		P23-54					.13	NO		9	
			P28-F8					.18	NO		10	
F	6	3										
F	6R		P23-56					.13	NO		9	
			P28-G9					.18	NO		10	
F	6Y		P23-57					.13	NO		9	
			P28-F9					.18	NO		10	
F	7	4										
F	7G		P23-6					.13	NO		9	
			P28-B7					.18	NO		10	
F	7R		P23-5					.13	NO		9	
			P28-A7					.18	NO		10	
F	7Y		P23-7					.13	NO		9	
			P28-B8					.18	NO		10	
F	8	5			1.75	1.50				6B	14	
					1.00	.75				6B	14	
F	8A	6	SHLD F8					.20	NO			
			P23-37					.13	NO		9	

SIZE	CODE IDENT NO.	
A	80230	2014646
SCALE-NONE	REV LTR G	SHEET 9 OF 14

MIL 2084 9-85

WIRING HARNESS F 2014646 G

LEAD IDENT	WIRE MATL ITEM	LEAD LG	CIRCUIT PT FROM (A) TO (B)	TERM. AREA NO.	JKT STRIP LG	SHLD STRIP LG	LEAD CUT LG	INS STRIP LG	TIN	NOTE ONE, FIG	ACCESSORY ITEMS	REMARKS
F 8B	6		P28-C8					.18	NO		10	
			SHLD F8					.20	NO		10	
F 8R			P23-38					.13	NO		9	
			P28-B9					.18	NO		11	
F 8Y			P23-39					.13	NO		9	
			P28-C9					.18	NO		11	
F 9	5				1.75	1.50				7	25	
					1.00	.75				68	14	
F 9B	6		P28-G3					.18	NO		10	
			SHLD F9					.20	NO			
F 9R			P23-42					.13	NO		9	
			P28-G2					.18	NO		11	
F 9Y			P23-41					.13	NO		9	
			P28-G1					.18	NO		11	
F 10	5				1.75	1.50				7	25	
					1.00	.75				68	14	
F 10B	6		P28-H3					.18	NO		10	
			SHLD F10					.20	NO			
F 10R			P23-44					.13	NO		9	
			P28-H1					.18	NO		11	
F 10Y			P23-45					.13	NO		9	
			P28-H2					.18	NO		11	
F 11	5				1.75	1.50				7	25	
					1.00	.75				68	14	

SIZE	CODE IDENT NO.	
A	80230	2014646
SCALE-NONE	REV LTR G	SHEET 10 OF 14

MIL 2084 9-65

WIRING HARNESS F 2014646 G

LEAD IDENT	WIRE MATL ITEM	LEAD LG	CIRCUIT PT FROM (A) TO (B)	TERM. AREA NO.	JKT STRIP LG	SHLD STRIP LG	LEAD CUT LG	INS STRIP LG	TIN	NOTE ONE, FIG	ACCESSORY ITEMS	REMARKS
F 11B	6		P28-D7					.18	NO		10	
			SHLD F11					.20	NO		10	
F 11R			P23-50					.13	NO		9	
			P28-D8					.18	NO		11	
F 11Y			P23-51					.13	NO		9	
			P28-D9					.18	NO		11	
F 12	4											
F 12G			P23-3					.13	NO		9	
			P28-B4					.18	NO		10	
F 12R			P23-2					.13	NO		9	
			P28-A4					.18	NO		10	
F 12Y			P23-1					.13	NO		9	
			P28-A3					.18	NO		10	
F 13	5				1.75	1.50				68	14	
					1.00	.75				68	14	
F 13A	6		SHLD F13					.20	NO			
			P23-35					.13	NO		9	
F 13B	6		P28-B3					.18	NO		10	
			SHLD F13					.20	NO			
F 13R			P23-33					.13	NO		9	
			P28-B1					.18	NO		11	
F 13Y			P23-34					.13	NO		9	
			P28-B2					.18	NO		11	

SIZE	CODE IDENT NO.	
A	80230	2014646
SCALE-NONE	REV LTR G	SHEET 11 OF 14

MIL 2084 9-65

WIRING HARNESS F 2014646 G

LEAD IDENT	WIRE MATL ITEM	LEAD LG	CIRCUIT PT FROM (A) TO (B)	TERM. AREA NO.	JKT STRIP LG	SHLD STRIP LG	LEAD CUT LG	INS STRIP LG	TIN	NOTE ONE, FIG	ACCESSORY ITEMS	REMARKS
F 14	5				1.75	1.50				7	25	
					1.00	.75				68	14	
F 14B	6		P28-F3					.18	NO		10	
			SHLD F14					.20	NO			
F 14R			P23-9					.13	NO		9	
			P28-F2					.18	NO		11	
F 14Y			P23-10					.13	NO		9	
			P28-F1					.18	NO		11	
F 15	5				1.75	1.50				7	25	
					1.00	.75				68	14	
F 15B	6		P28-D3					.18	NO		10	
			SHLD F15					.20	NO			
F 15R			P23-12					.13	NO		9	
			P28-D1					.18	NO		11	
F 15Y			P23-13					.13	NO		9	
			P28-D2					.18	NO		11	
F 16	5				1.75	1.50				7	25	
					1.00	.75				68	14	
F 16B	6		P28-C3					.18	NO		10	
			SHLD F16					.20	NO			
F 16R			P23-18					.13	NO		9	
			P28-C2					.18	NO		11	
F 16Y			P23-19					.13	NO		9	
			P28-C1					.18	NO		11	

SIZE	CODE IDENT NO.	
A	80230	2014646
SCALE-NONE	REV LTR G	SHEET 12 OF 14

MIL 2084 9-65

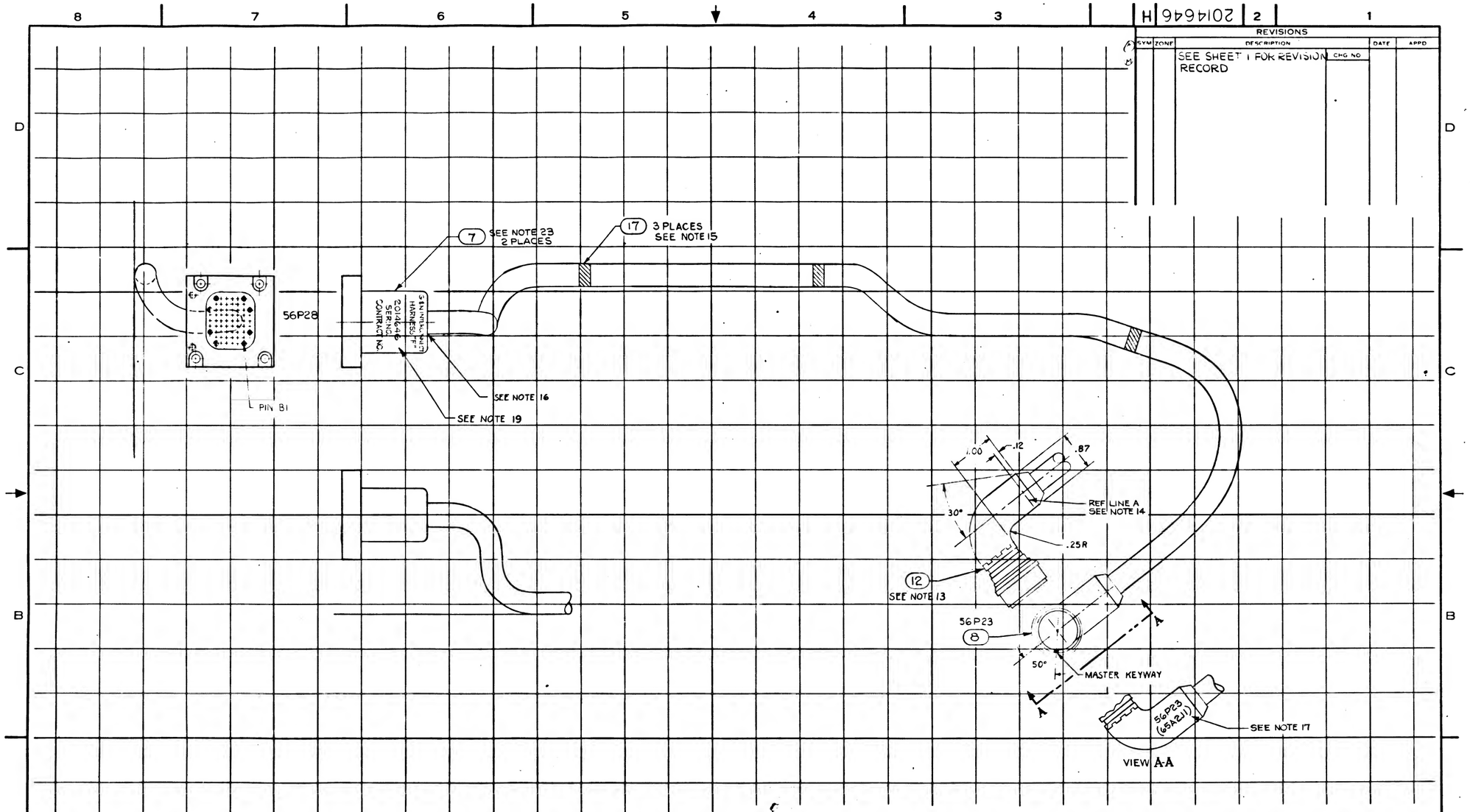
WIRING HARNESS F 2014646 G

LEAD IDENT	WIRE MATL ITEM	LEAD LG	CIRCUIT PT FROM (A) TO (B)	TERM. AREA NO.	JKT STRIP LG	SHLD STRIP LG	LEAD CUT LG	INS STRIP LG	TIN	NOTE ONE, FIG	ACCESSORY ITEMS	REMARKS
F 17	1		P23-59					.13	NO		9	
			P28-K3					.18	NO		11	

SIZE	CODE IDENT NO.	
A	80230	2014646
SCALE-NONE	REV LTR G	SHEET 13 OF 14

MIL 2084 9-65

REVISIONS				
SYM	ZONE	DESCRIPTION	DATE	APPD
		SEE SHEET 1 FOR REVISION RECORD		



2014567		UNLESS OTHERWISE SPECIFIED DIMENSIONS ARE IN INCHES TOLERANCES ON FRACTIONS ± DECIMALS 2 PLACE ±.03 ANGLES ±5°	MIT INSTRUMENTATION LAB CAMBRIDGE, MASS.	MANNED SPACECRAFT CENTER HOUSTON, TEXAS
NEXT ASSY	USED ON	DO NOT SCALE THIS DRAWING	DRAWN Cindy Rotes DATE 12-16-65	G&N INTERCONNECT HARNESS "F" (CM, BLOCK II)
APPLICATION		MATERIAL ———	CHECKED D. E. Abraham	
		CONTRACT	APPROVAL Paul Nelson DEC 16, 65	CODE IDENT NO 80230 / SIZE D / 2014646
			NASA APPROVAL	SCALE 1:1 / SHEET 14 OF 14
			MIT APPROVAL	

NOTES:

1. INTERPRET DRAWING IN ACCORDANCE WITH STANDARDS PRESCRIBED BY MIL-D-70327.
2. VENDOR ITEM-SEE SPECIFICATION CONTROL DRAWING.
3. SELECT AS REQUIRED
4. DRAWING FOR REFERENCE ONLY.

REVISIONS

SYM	ZONE	DESCRIPTION	CHG NO.	DATE	APPD.
C		INITIAL CLASS A RELEASE TDRR NO. 22050			

	ITEM NO.	NO. REQD	PART OR IDENTIFYING NUMBER	NOMENCLATURE OR DESCRIPTION
		1		CLAMP, CONNECTOR
		3		CLAMP, CONNECTOR
		AR	1010989	TAPE, SHIELDING, EMI/RFI
SEE NOTE 3		1	1010981-30 THRU 1010981-1	GROMMET
SEE NOTE 2		1	1010400-2	CLAMP, CABLE
SEE NOTE 2		5	1010490-112	INSULATION, SLEEVING, ELECT
SEE NOTE 2		5	1010490-110	
SEE NOTES 2 & 3		AR	1012507-4	TAPE, LACING
			1012507-2	
SEE NOTE 2		AR	1010679	ADHESIVE ACTIVATOR
SEE NOTE 2		AR	1012503	COMPOUND, POTTING, POLYURETHANE
SEE NOTE 2		AR	1010661	EPOXY RESIN
SEE NOTE 2		5	1010402-2	INSULATION, SLEEVING, ELECT
SEE NOTE 2		5	1010402-1	
		1		ADAPTER, POTTING MOLD
		3		ADAPTER, POTTING MOLD
		AR	MIL-T-23594	TAPE, TEFLON
		80	1010958-1	PLUG, PROTECTIVE SEALING
		102	1010956-1	INSULATOR, MALE
		102	1010955-1	CONTACT, MALE
SEE NOTE 2		85	1010770-1	CONTACT, PIN
SEE NOTE 2		231	1010770-2	CONTACT, SOCKET
		1	1010929-101	CONNECTOR, PLUG (P22)
		1	-008	(P21)
		1	-001	(P32)
SEE NOTE 2		1	1010929-002	CONNECTOR, PLUG (P20)

LIST OF PARTS AND MATERIALS

	ITEM NO.	NO. REQD	P/N	DESCRIPTION
		4		CLAMP, PSA CONNECTOR 5052-H32-AL PER QQ-A-250/8, 2"LG X 1/2"WD X 1/16"THK
		2		COVER, PSA CONNECTOR 5052-H32-AL PER QQ-A-250/8, 8"LG X 3"WD X 1/32"THK
		1		CONNECTOR, PSA (P29) 6061-T6-AL PER QQ-A-250/11, 6"LG X 2"WD X 1/2"THK
SEE NOTE 4		X	2014677	INTERCONNECT LIST
		8	MS21209-C0415	INSERT, SCREW THREAD, SELFLOCKING
		2	6008007	SCREW, CAPTIVE
		2	1008807	CLAMP CABLE 1 3/8" X 5/8"
		2	1010400-3	CLAMP, LOOP, HINGED

NEXT ASSY	USED ON
2014567-011	2014567-011

APPLICATION

UNLESS OTHERWISE SPECIFIED
DIMENSIONS ARE IN INCHES
TOLERANCES ON
FRACTIONS + — ; DECIMALS + — ; ANGLES + —
DO NOT SCALE THIS DRAWING

MATERIAL —

CONTRACT NAS 9-497

MIT INSTRUMENTATION LAB
CAMBRIDGE, MASS.
DWG. NO. CONTRACT
DRAWN E. LITZOW 26 MAY 65 DATE
CHECKED FESLER 28 MAY 65
APPROVAL P.C. Watson 8-24-65
APPROVAL 8-10-65
NASA APPROVAL
MIT APPROVAL

MANNED SPACECRAFT CENTER
HOUSTON, TEXAS

G&N INTERCONNECT HARNESS "G"

CODE IDENT NO. 80230 | SIZE C | 2014647

SCALE — | SHEET 1 OF 1

2014647 C

MIL 1077C-P

APPLICATION		REVISIONS			
NEXT ASSY	USED ON	SYM	DESCRIPTION	DATE	APPROVAL
2014567-011	2014567-011	E	REPLACES REV(D) WITH CHANGE PER MXC 207377	8 DEC 65	
		F	ADDED CONFIGURATION AND CHANGED PER TDR 23182		

REPLACES REV D WITH CHANGE

REV	F	F	F	F	F	F																					
SHEET	20	21	22	23	24	25	26	27																			
REV STATUS									F	F	F	F	F	F	F	F	F	F	F	F	F	F	F	F	F	F	F
OF SHEETS									1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16	17	18	19

MIT INSTRUMENTATION LAB
CAMBRIDGE, MASS
CONTRACT
DWG. NO.

MANNED SPACECRAFT CENTER
HOUSTON, TEXAS

DRAWN 26 MAY 65
CHECKED 28 MAY 65
APPROVAL 24 MAY 65
APPROVAL

G&N INTERCONNECT HARNESS "G"

(C/M, BLOCK I)

CODE IDENT NO. 80230 | SIZE A | 2014647 | REV F

NASA APPROVAL
MIT APPROVAL
CONTRACT NAS 9-497 | SCALE — | SHEET 1 OF 27

NOTE NUMBER	GENERAL NOTES DESCRIPTION
1	SHIELD TERMINATION FIGURES ARE PER ND1002071 FOR FIGURE 6B AND ND 1002032 FOR FIGURE 7.
2	INTERPRET DRAWING IN ACCORDANCE WITH STANDARDS PRESCRIBED BY MIL-D-70327.
3	INTERCONNECT LIST FOR THIS HARNESS IS 2014677.
4	PARTIAL CIRCUIT POINTS ARE SHOWN. PREFIX WITH UNIT NUMBER 56 FOR COMPLETE CIRCUIT POINT.
5	THE SUFFIX LETTER OF A CONDUCTOR IDENTIFICATION NUMBER IDENTIFIES A SHIELD LEAD, COLOR, OR MARKED LETTER. A - FROM END OF SHIELD B - TO END OF SHIELD G - GREEN K - BLACK L - BLUE N - BROWN R - RED W - WHITE Y - YELLOW
6	ASTERISK DENOTES LOWER CASE LETTER.
7	GRID MODULE ON PICTURE SHEET IS 1 INCH TRUE POSITION.
8	UNLESS OTHERWISE SPECIFIED FEATURE CENTERLINES ON PICTURE SHEET ARE LOCATED WITHIN + OR - .25. ENDS OF HOOKUP WIRES OR ACCESSORIES ARE LOCATED WITHIN .12.
9	VENDOR ITEM - SEE SOURCE CONTROL OR SPECIFICATION CONTROL DRAWING.
10	CRIMP CONTACTS PER ND1002032.

SIZE	CODE IDENT NO.		
A	80230	2014647	
SCALE-NONE	REV LTR F	SHEET 2 OF 27	

MIL 2084 9-65

NOTE NUMBER	GENERAL NOTES DESCRIPTION
11	ALL UNUSED ~~CONNECT HOLES~~ CONTACT CAVITIES SHALL BE FILLED WITH A CONTACT OR CONTACT AND SEALING PLUG AS FOLLOWS CONNECTOR 56P22, USE ITEM NUMBERS 17 AND 24. CONNECTOR 56P29, USE ITEM NUMBER 20. CONNECTORS 56P20,21, AND 32, USE ITEM NUMBERS 18 AND 24.
12	LACE HARNESS PER ND1002032 USING ITEM NUMBER 26.
13	A SMALL QUANTITY OF POTTING COMPOUND MUST BE PUT BETWEEN THE THREADED PORTION OF CONNECTOR AND SILICONE RUBBER GROMMET TO SEAL AND BOND RING TO CONNECTOR PRIOR TO POTTING.
14	ALL SHIELDED TERMINATIONS SHALL BE LOCATED BELOW REFERENCE LINE A. THERE SHALL BE NO EXPOSED CONDUCTORS AT THE SURFACE OF THE POTTING COMPOUND.
15	BEFORE LACING HARNESS, APPLY 2 TURNS OF TAPE, TO INDICATE CABLE CLAMP LOCATION.
16	WRAP TAPE AROUND HARNESS IN AREA SHOWN AS REQUIRED TO BUILD UP DIAMETER TO FIT ~~CABLE CLAMP~~. SHELL HOLE.
17	MARK CONNECTOR WITH REFERENCE DESIGNATION AS SHOWN .12 HIGH, BLACK, HOT IMPRESSION STAMPING PER ND1002019, CENTRALIZE.
19	MARK CHARACTERS .12 HIGH, BLACK, PER ND1002019, SERIALIZE PER ND1002023.
20	CONTINUITY TEST PER CONDUCTOR CHART. RESISTANCE SHALL BE LESS THAN 1/2 OHM. TEST PER MIL-STD-202, METHOD 303.

SIZE	CODE IDENT NO.		
A	80230	2014647	
SCALE-NONE	REV LTR F	SHEET 3 OF 27	

MIL 2084 9-65

NOTE NUMBER	GENERAL NOTES DESCRIPTION
21	INSULATION RESISTANCE SHALL BE GREATER THAN 100 MEGOHMS WITH 500 VDC APPLIED BETWEEN A. THE ASSEMBLY PINS AND STRUCTURE GROUND, EXCEPT THOSE PINS ELECTRICALLY CONNECTED TO STRUCTURE GROUND. B. EACH PIN AND ALL OTHER PINS NOT ELECTRICALLY CONNECTED, INCLUDING ALL SPARE PINS. TEST PER MIL-STD-202, METHOD 302, EXCEPT ELECTRIFICATION TIME NOT APPLICABLE.
22	PRESEAL BACK OF CONNECTOR P29 PRIOR TO ENCAPSULATION PER ND1002187 TYPE III USING ITEMS 31, 32, 33, and 34.
23	ENCAPSULATE BACK OF CONNECTORS PER ND1002236 USING ITEMS 29 and 30.
24	CONDUCTORS SHALL ENTER CONNECTOR 56P29 THROUGH THE APPROPRIATE BRANCH SPECIFIED IN THE REMARKS COLUMN.
25	GROUP SHIELDING - THREAD ONE CONTINUOUS LENGTH OF GROUND WIRE, ITEM 38, THROUGH CENTER OF EMI/RFI SHIELDING TAPE, ITEM 39. ALLOW 6 INCHES OF GROUND WIRE TO EXTEND BEYOND ENDS OF SHIELDING TAPE. WRAP CABLE WITH ONE CONTINUOUS LENGTH OF PREPARED SHIELDING. SUCCESSIVE TURNS SHALL OVERLAP BY APPROXIMATELY 1/2 THE WIDTH OF THE TAPE, WITH A MINIMUM OF RIDGES AND FOLDS.
26	COMPLETELY COVER SHIELD WITH ONE CONTINUOUS WRAP OF INSULATION TAPE, ITEM 27. SUCCESSIVE TURNS SHALL OVERLAP BY APPROXIMATELY 1/2 THE WIDTH OF THE TAPE WITH A MINIMUM OF RIDGES AND FOLDS.
27	ASSEMBLE INSULATION TUBING, ITEM 42, OVER GROUND WIRE AS REQUIRED TO REACH TERMINATION. ASSEMBLE SHRINK SLEEVING AS SHOWN.

MANNED SPACECRAFT CENTER HOUSTON, TEXAS	SIZE		
	A	2014647	
SCALE - NONE	REV LTR F	SHEET 4 of 27	

MIL 2084 4-63

NOTE NUMBER — GENERAL NOTES — DESCRIPTION

LEAD TOLERANCE CHART

	LEAD LG	JKT STRIP LG	SHIELD STRIP LG	LEAD CUT LG	INS STRIP LG
UNDER 3 INCHES	+ .12-.00	+.06-.06	+.06-.06	+.06-.06	+.06-.00
3 INCH TO 3 FT	+ .50-.00	+.25-.25	+.25-.25	+.25-.25	
3 FT TO 10 FT	+1.00-.00				
10 FT AND OVER	+2.00-.00				

MANNED SPACECRAFT CENTER HOUSTON, TEXAS	SIZE A	2014647	
SCALE-NONE	REV LTR F		SHEET 5 of 27

MIL 2084 4-63

SEE NOTE — LIST OF MATERIALS

NUMBER	ITEM	QTY	PART NO.	DESCRIPTION
	1	1	2014647- 1	WIRE PER 1010789-006, 22 AWG, YEL, 5 FT TOT LG
	2	1	2014647- 2	WIRE PER 1010789-016, 26 AWG, YEL, 265 FT TOT LG
	3	1	2014647- 3	WIRE PER 1010789-008, 22 AWG, YEL, RED, 15 FT TOT LG
	4	1	2014647- 4	WIRE PER 1010789-003, 24 AWG, YEL, RED, 5 FT TOT LG
	5	1	2014647- 5	WIRE PER 1010789-017, 26 AWG, YEL, RED, 75 FT TOT LG
	6	1	2014647- 6	WIRE PER 1010789-009, 22 AWG, YEL, RED, GRN, 5 FT TOT LG
	7	1	2014647- 7	WIRE PER 1010789-004, 24 AWG, YEL, RED, GRN, 5 FT TOT LG
	8	1	2014647- 8	WIRE PER 1010789-018, 26 AWG, YEL, RED, GRN, 5 FT TOT LG
	9	1	2014647- 9	WIRE PER 1010789-019, 26 AWG, YEL, RED, GRN, BRN, 5 FT TOT LG
	10	1	2014647- 10	WIRE PER 1010789-015, 26 AWG, YEL, RED, YEL JKT, 60 FT TOT LG
	11	1	2014647- 11	WIRE PER 1010789-002, 24 AWG, BLK, 15 FT TOT LG
	12	1	2014747-011	CONNECTOR, PLUG, ELECTRICAL (56P29)
9	13	1	1010929-002	CONNECTOR, PLUG, ELECTRICAL (56P20)
9	14	1	1010929-008	CONNECTOR, PLUG, ELECTRICAL (56P21)

SIZE A	CODE IDENT NO. 80230	2014647	
SCALE-NONE	REV LTR F		SHEET 6 OF 27

MIL 2084 9-65

SEE NOTE — LIST OF MATERIALS

NUMBER	ITEM	QTY	PART NO.	DESCRIPTION
9	15	1	1010929-101	CONNECTOR, PLUG, ELECTRICAL (56P22)
9	16	1	1010929-001	CONNECTOR, PLUG, ELECTRICAL (56P32)
9	17	REF	1010770- 1	CONTACT, PIN, SUPPLIED WITH CONNECTOR 1010929
9	18	REF	1010770- 2	CONTACT, SOCKET, SUPPLIED WITH CONNECTORS 1010929 AND 1010930
9	19	2	1010930-017	CONNECTOR, RECEPTACLE, ELECTRICAL (56J6, 56J7)
9	20	105	1010955- 1	CONTACT, MALE
9	21	77	1010955- 2	CONTACT, MALE
	22	3	2014670- 4	ADAPTER, CONNECTOR
	23	1	2014670- 5	ADAPTER, CONNECTOR
9	24	110	1010958- 1	PLUG, PROTECTIVE SEALING
9	25	15	1010402- 2	SLEEVE, SOLDER
9	26	AR	1012507- 4	TAPE, LACING
	27	AR	MIL-T-23594	TAPE, TEFLON, TYPE II, 1 INCH WIDE
	28	AR	MIL-T-23594	TAPE, TEFLON, TYPE II, 1/4 INCH WIDE
9	29	AR	1012503	COMPOUND, POTTING, POLYURETHANE
9	30	AR	1012504	PRIMER, METAL PARTS
9	31	AR	1006277	SILICA, PULVERIZED, PYROGENIC
9	32	AR	1008822	COLORANT, EPOXY BASE

SIZE A	CODE IDENT NO. 80230	2014647	
SCALE-NONE	REV LTR F		SHEET 7 OF 27

MIL 2084 9-65

SEE NOTE — LIST OF MATERIALS

NUMBER	ITEM	QTY	PART NO.	DESCRIPTION
9	33	AR	1010661	EPOXY RESIN
9	34	AR	1010679	ADHESIVE, ACTIVATOR
	35	2	2014670-010	ADAPTER, CONNECTOR
9	36	15	1012534- 36	SLEEVING, INSULATION (HEAT SHRINKABLE)
	37	1	MS17182-2	TERMINAL LUG
	38	1	2014647-012	WIRE PER QQ-W-343, TYPE C, CLASS C, 22AWG, 16 FT TOT LG
	39	AR	1010989	TAPE, SHIELDING, EMI/RFI
	~~XXX~~	~~AR~~	~~XXXXXXXXXXX~~	~~XXXXXXXXXXXXXXXXXXXX~~
	40	1	1006783-93	SCREW, BUTTON HD
	41	1	MS35333-69	WASHER, LOCK
	42	AR	1006776-44	INSULATION SLEEVING

SIZE A	CODE IDENT NO. 80230	2014647	
SCALE-NONE	REV LTR F		SHEET 8 OF 27

MIL 2084 9-65

WIRING HARNESS G 2014647 F

LEAD IDENT	WIRE MATL ITEM	LEAD LG	CIRCUIT PT FROM (A) TO (B)	TERM. AREA NO.	JKT STRIP LG	SHLD STRIP LG	LEAD CUT LG	INS STRIP LG	TIN	NOTE ONE, FIG	ACCESSORY ITEMS	REMARKS
G	1	5										
G	1R		P21-51 P29-H5					.13 .18	NO NO		18 21	BRANCH 1
G	1Y		P21-29 P29-K5					.13 .18	NO NO		18 21	BRANCH 1
G	2	5										
G	2R		P21-53 P29-K3					.13 .18	NO NO		18 21	BRANCH 1
G	2Y		P21-52 P29-K4					.13 .18	NO NO		18 21	BRANCH 1
G	3	5										
G	3R		P21-28 P29-K7					.13 .18	NO NO		18 21	BRANCH 1
G	3Y		P21-49 P29-K6					.13 .18	NO NO		18 21	BRANCH 1
G	6	5										
G	6R		P21-3 P29-G11					.13 .18	NO NO		18 21	BRANCH 1
G	6Y		P21-10 P29-H11					.13 .18	NO NO		18 21	BRANCH 1

SIZE	CODE IDENT NO.	
A	80230	2014647
SCALE-NONE	REV LTR F	SHEET 9 OF 27

MIL 2084 9-65

WIRING HARNESS G 2014647 F

LEAD IDENT	WIRE MATL ITEM	LEAD LG	CIRCUIT PT FROM (A) TO (B)	TERM. AREA NO.	JKT STRIP LG	SHLD STRIP LG	LEAD CUT LG	INS STRIP LG	TIN	NOTE ONE, FIG	ACCESSORY ITEMS	REMARKS
G	7	10			1.75 1.00	1.50 .75				7 6B	36 25	
G	7B	11	P29-F2 SHLD G7					.18 .20	NO NO		20	BRANCH 1
G	7R		P21-39 P29-G2					.13 .18	NO NO		18 21	BRANCH 1
G	7Y		P21-38 P29-H2					.13 .18	NO NO		18 21	BRANCH 1
G	8	10			1.75 1.00	1.50 .75				7 6B	36 25	
G	8B	11	P29-F1 SHLD G8					.18 .20	NO NO		20	BRANCH 1
G	8R		P21-37 P29-G1					.13 .18	NO NO		18 21	BRANCH 1
G	8Y		P21-61 P29-H1					.13 .18	NO NO		18 21	BRANCH 1
G	9	5										
G	9R		P21-9 P29-B4					.13 .18	NO NO		18 21	BRANCH 1
G	9Y		P21-21 P29-A4					.13 .18	NO NO		18 21	BRANCH 1

SIZE	CODE IDENT NO.	
A	80230	2014647
SCALE-NONE	REV LTR F	SHEET 10 OF 27

MIL 2084 9-65

WIRING HARNESS G 2014647 F

LEAD IDENT	WIRE MATL ITEM	LEAD LG	CIRCUIT PT FROM (A) TO (B)	TERM. AREA NO.	JKT STRIP LG	SHLD STRIP LG	LEAD CUT LG	INS STRIP LG	TIN	NOTE ONE, FIG	ACCESSORY ITEMS	REMARKS
G	11	10			1.75 1.00	1.50 .75				7 6B	36 25	
G	11B	11	P29-C6 SHLD G11					.18 .20	NO NO		20	BRANCH 1
G	11R		P21-17 P29-B6					.13 .18	NO NO		18 21	BRANCH 1
G	11Y		P21-16 P29-A6					.13 .18	NO NO		18 21	BRANCH 1
G	12	10			1.75 1.00	1.50 .75				7 6B	36 25	
G	12B	11	P29-D2 SHLD G12					.18 .20	NO NO		20	BRANCH 1
G	12R		P21-59 P29-C2					.13 .18	NO NO		18 21	BRANCH 1
G	12Y		P21-36 P29-B2					.13 .18	NO NO		18 21	BRANCH 1

SIZE	CODE IDENT NO.	
A	80230	2014647
SCALE-NONE	REV LTR F	SHEET 11 OF 27

MIL 2084 9-65

WIRING HARNESS G 2014647 F

LEAD IDENT	WIRE MATL ITEM	LEAD LG	CIRCUIT PT FROM (A) TO (B)	TERM. AREA NO.	JKT STRIP LG	SHLD STRIP LG	LEAD CUT LG	INS STRIP LG	TIN	NOTE ONE, FIG	ACCESSORY ITEMS	REMARKS
G	13	10			1.75 1.00	1.50 .75				7 6B	36 25	
G	13B	11	P29-D1 SHLD G13					.18 .20	NO NO		20	BRANCH 1
G	13R		P21-57 P29-B1					.13 .18	NO NO		18 21	BRANCH 1
G	13Y		P21-58 P29-C1					.13 .18	NO NO		18 21	BRANCH 1
G	14	5										
G	14R		P21-42 P29-K9					.13 .18	NO NO		18 21	BRANCH 1
G	14Y		P21-43 P29-H9					.13 .18	NO NO		18 21	BRANCH 1
G	15	5										
G	15R		P21-24 P29-G9					.13 .18	NO NO		18 21	BRANCH 1
G	15Y		P21-44 P29-G10					.13 .18	NO NO		18 21	BRANCH 1
G	16	5										
G	16R		P21-46 P29-H10					.13 .18	NO NO		18 21	BRANCH 1

SIZE	CODE IDENT NO.	
A	80230	2014647
SCALE-NONE	REV LTR F	SHEET 12 OF 27

MIL 2084 9-65

WIRING HARNESS G 2014647 F

LEAD IDENT	WIRE MATL ITEM	LEAD LG	CIRCUIT PT FROM (A) TO (B)	TERM. AREA NO.	JKT STRIP LG	SHLD STRIP LG	LEAD CUT LG	INS STRIP LG	TIN	NOTE ONE, FIG	ACCESSORY ITEMS	REMARKS
G 16Y			P21-25 P29-K10					.13 .18	NO NO		18 21	BRANCH 1
G 17	8											
G 17G			P21-26 P29-G12					.13 .18	NO NO		18 21	BRANCH 2
G 17R			P21-12 P29-H12					.13 .18	NO NO		18 21	BRANCH 2
G 17Y			P21-27 P29-H13					.13 .18	NO NO		18 21	BRANCH 2
G 18	5											
G 18R			P20-7 P29-K23					.13 .18	NO NO		18	BRANCH 2
G 18Y			P20-8 P29-K22					.13 .18	NO NO		18 21	BRANCH 2
G 19	5											
G 19R			P20-23 P29-F25					.13 .18	NO NO		18 21	BRANCH 2
G 19Y			P20-24 P29-F24					.13 .18	NO NO		18 21	BRANCH 2
G 20	5											

SIZE	CODE IDENT NO.	
A	80230	2014647
SCALE-NONE	REV LTR F	SHEET 3 ~~12~~ OF 27

MIL 2084 9-65

WIRING HARNESS G 2014647 F

LEAD IDENT	WIRE MATL ITEM	LEAD LG	CIRCUIT PT FROM (A) TO (B)	TERM. AREA NO.	JKT STRIP LG	SHLD STRIP LG	LEAD CUT LG	INS STRIP LG	TIN	NOTE ONE, FIG	ACCESSORY ITEMS	REMARKS
G 20R			P20-3 P29-G24					.13 .18	NO NO		18 21	BRANCH 2
G 20Y			P20-11 P29-G25					.13 .18	NO NO		18 21	BRANCH 2
G 21	5											
G 21R			P20-25 P29-H25					.13 .18	NO NO		18 21	BRANCH 2
G 21Y			P20-44 P29-H24					.13 .18	NO NO		18 21	BRANCH 2
G 22	4											
G 22R			P20-5 P29-C23					.13 .18	NO NO		18 20	BRANCH 2
G 22Y			P20-4 P29-C24					.13 .18	NO NO		18 20	BRANCH 2
G 23	7											
G 23G			P20-30 P29-B25					.13 .18	NO NO		18 20	BRANCH 2
G 23R			P20-15 P29-C25					.13 .18	NO NO		18 20	BRANCH 2
G 23Y			P20-14 P29-B24					.13 .18	NO NO		18 20	BRANCH 2

SIZE	CODE IDENT NO.	
A	80230	2014647
SCALE-NONE	REV LTR F	SHEET 4 ~~13~~ OF 27

MIL 2084 9-65

WIRING HARNESS G 2014647 F

LEAD IDENT	WIRE MATL ITEM	LEAD LG	CIRCUIT PT FROM (A) TO (B)	TERM. AREA NO.	JKT STRIP LG	SHLD STRIP LG	LEAD CUT LG	INS STRIP LG	TIN	NOTE ONE, FIG	ACCESSORY ITEMS	REMARKS
G 24	5											
G 24R			P20-46 P29-A23					.13 .18	NO NO		18 21	BRANCH 2
G 24Y			P20-71 P29-B23					.13 .18	NO NO		18 21	BRANCH 2
G 25	5											
G 25R			P20-73 P29-B22					.13 .18	NO NO		18 21	BRANCH 2
G 25Y			P20-72 P29-A22					.13 .18	NO NO		18 21	BRANCH 2
G 26	5											
G 26R			P20-28 P29-A21					.13 .18	NO NO		18 21	BRANCH 2
G 26Y			P20-48 P29-B21					.13 .18	NO NO		18 21	BRANCH 2
G 27	10				1.75 1.00	1.50 .75				7 6B	36 25	
G 27B	11		P29-C9 SHLD G27					.18 .20	NO NO		20	BRANCH 1
G 27R			P20-80 P29-A9					.13 .18	NO NO		18 21	BRANCH 1

SIZE	CODE IDENT NO.	
A	80230	2014647
SCALE-NONE	REV LTR F	SHEET 5 ~~14~~ OF 27

MIL 2084 9-65

WIRING HARNESS G 2014647 F

LEAD IDENT	WIRE MATL ITEM	LEAD LG	CIRCUIT PT FROM (A) TO (B)	TERM. AREA NO.	JKT STRIP LG	SHLD STRIP LG	LEAD CUT LG	INS STRIP LG	TIN	NOTE ONE, FIG	ACCESSORY ITEMS	REMARKS
G 27Y			P20-81 P29-B9					.13 .18	NO NO		18 21	BRANCH 1
G 28	10				1.75 1.00	1.50 .75				7 6B	36 25	
G 28B	11		P29-C10 SHLD G28					.18 .20	NO NO		20	BRANCH 1
G 28R			P20-57 P29-B10					.13 .18	NO NO		18 21	BRANCH 1
G 28Y			P20-82 P29-A10					.13 .18	NO NO		18 21	BRANCH 1
G 29	10				1.75 1.00	1.50 .75				7 6B	36 25	
G 29B	11		P29-D11 SHLD G29					.18 .20	NO NO		20	BRANCH 1
G 29R			P20-85 P29-B11					.13 .18	NO NO		18 21	BRANCH 1
G 29Y			P20-61 P29-C11					.13 .18	NO NO		18 21	BRANCH 1
G 30	10				1.75 1.00	1.50 .75				7 6B	36 25	
G 30B	11		P29-D12 SHLD G30					.18 .20	NO NO		20	BRANCH 2
G 30R			P20-83 P29-C12					.13 .18	NO NO		18 21	BRANCH 2

SIZE	CODE IDENT NO.	
A	80230	2014647
SCALE-NONE	REV LTR F	SHEET 6 ~~15~~ OF 27

MIL 2084 9-65

LEAD IDENT	WIRE MATL ITEM	LEAD LG	CIRCUIT PT FROM (A) TO (B)	TERM. AREA NO.	JKT STRIP LG	SHLD STRIP LG	LEAD CUT LG	INS STRIP LG	TIN	NOTE ONE, FIG	ACCESSORY ITEMS	REMARKS
G 30Y			P20-84 P29-812					.13 .18	NO NO		18 21	BRANCH 2
G 31	10				1.75 1.00	1.50 .75				7 6B	36 25	
G 31B	11		P29-D13 SHLD G31					.18 .20	NO NO		20	BRANCH 2
G 31R			P20-59 P29-B13					.13 .18	NO NO		18 21	BRANCH 2
G 31Y			P20-35 P29-C13					.13 .18	NO NO		18 21	BRANCH 2
G 32	10				1.75 1.00	1.50 .75				7 6B	36 25	
G 32B	11		P29-D14 SHLD G32					.18 .20	NO NO		20	BRANCH 2
G 32R			P20-34 P29-C14					.13 .18	NO NO		18 21	BRANCH 2
G 32Y			P20-33 P29-B14					.13 .18	NO NO		18 21	BRANCH 2
G 33	9											
G 33G			P20-22 P29-B15					.13 .18	NO NO		18 21	BRANCH 2
G 33N			P20-40 P29-C15					.13 .18	NO NO		18 21	BRANCH 2

SIZE	CODE IDENT NO.	
A	80230	2014647
SCALE-NONE	REV LTR F	SHEET 7 OF 27

MIL 2084 9-65

LEAD IDENT	WIRE MATL ITEM	LEAD LG	CIRCUIT PT FROM (A) TO (B)	TERM. AREA NO.	JKT STRIP LG	SHLD STRIP LG	LEAD CUT LG	INS STRIP LG	TIN	NOTE ONE, FIG	ACCESSORY ITEMS	REMARKS
G 33R			P20-64 P29-C16					.13 .18	NO NO		18 21	BRANCH 2
G 33Y			P20-39 P29-B16					.13 .18	NO NO		18 21	BRANCH 2
G 35	6											
G 35G			P20-43 P29-C19					.13 .18	NO NO		18 20	BRANCH 2
G 35R			P20-68 P29-C18					.13 .18	NO NO		18 20	BRANCH 2
G 35Y			P20-69 P29-D18					.13 .18	NO NO		18 20	BRANCH 2
G 36	3											
G 36R			P20-66 P29-A20					.13 .18	NO NO		18 20	BRANCH 2
G 36Y			P20-42 P29-B20					.13 .18	NO NO		18 20	BRANCH 2
G 37	5											
G 37R			P20-74 P29-C22					.13 .18	NO NO		18 21	BRANCH 2
G 37Y			P20-75 P29-C21					.13 .18	NO NO		18 21	BRANCH 2

SIZE	CODE IDENT NO.	
A	80230	2014647
SCALE-NONE	REV LTR F	SHEET 8 OF 27

MIL 2084 9-65

LEAD IDENT	WIRE MATL ITEM	LEAD LG	CIRCUIT PT FROM (A) TO (B)	TERM. AREA NO.	JKT STRIP LG	SHLD STRIP LG	LEAD CUT LG	INS STRIP LG	TIN	NOTE ONE, FIG	ACCESSORY ITEMS	REMARKS
G 38	10				1.75 1.00	1.50 .75				7 6B	36 25	
G 38B	11		P29-G17 SHLD G38					.18 .20	NO NO		20	BRANCH 2
G 38R			P20-79 P29-G15					.13 .18	NO NO		18 21	BRANCH 2
G 38Y			P20-78 P29-G16					.13 .18	NO NO		18 21	BRANCH 2
G 39	10				1.75 1.00	1.50 .75				7 6B	36 25	
G 39B	11		P29-H17 SHLD G39					.18 .20	NO NO		20	BRANCH 2
G 39R			P20-54 P29-H16					.13 .18	NO NO		18 21	BRANCH 2
G 39Y			P20-31 P29-H15					.13 .18	NO NO		18 21	BRANCH 2
G 40	2		P22-1 P32-1					.13 .13	NO NO		17 18	A
G 41	2		P22-5 P32-5					.13 .13	NO NO		17 18	A
G 42	2		P22-6 P32-6					.13 .13	NO NO		17 18	A
G 43	2		P22-16 P32-16					.13 .13	NO NO		17 18	A

SIZE	CODE IDENT NO.	
A	80230	2014647
SCALE-NONE	REV LTR F	SHEET 9 OF 27

MIL 2084 9-65

LEAD IDENT	WIRE MATL ITEM	LEAD LG	CIRCUIT PT FROM (A) TO (B)	TERM. AREA NO.	JKT STRIP LG	SHLD STRIP LG	LEAD CUT LG	INS STRIP LG	TIN	NOTE ONE, FIG	ACCESSORY ITEMS	REMARKS
G 44	2		P22-17 P32-17					.13 .13	NO NO		17 18	A
G 45	2		P22-18 P32-18					.13 .13	NO NO		17 18	A
G 46	2		P22-19 P32-19					.13 .13	NO NO		17 18	A
G 47	2		P22-7 P32-7					.13 .13	NO NO		17 18	A
G 48	2		P22-8 P32-8					.13 .13	NO NO		17 18	A
G 49	2		P22-20 P32-20					.13 .13	NO NO		17 18	A
G 50	2		P22-2 P32-2					.13 .13	NO NO		17 18	A
G 51	2		P22-9 P32-9					.13 .13	NO NO		17 18	A
G 52	2		P22-21 P32-21					.13 .13	NO NO		17 18	A
G 53	2		P22-22 P32-22					.13 .13	NO NO		17 18	A
G 54	2		P22-23 P32-23					.13 .13	NO NO		17 18	A
G 55	2		P22-10 P32-10					.13 .13	NO NO		17 18	A

SIZE	CODE IDENT NO.	
A	80230	2014647
SCALE-NONE	REV LTR F	SHEET 10 OF 27

MIL 2084 9-65

WIRING HARNESS G 2014647 F

LEAD IDENT	WIRE MATL ITEM	LEAD LG	CIRCUIT PT FROM (A) TO (B)	TERM. AREA NO.	JKT STRIP LG	SHLD STRIP LG	LEAD CUT LG	INS STRIP LG	TIN	NOTE ONE, FIG	ACCESSORY ITEMS	REMARKS
G 56	2		P22-24					.13	NO		17	A
			P32-24					.13	NO		18	
G 57	2		P22-3					.13	NO		17	A
			P32-3					.13	NO		18	
G 58	2		P22-11					.13	NO		17	A
			P32-11					.13	NO		18	
G 59	2		P22-~~25~~ 79					.13	NO		17	A
			P32-~~25~~ 79					.13	NO		18	
G 60	2		P22-13					.13	NO		17	A
			P32-13					.13	NO		18	
G 61	2		P22-~~28~~ 33					.13	NO		17	A
			P32-~~28~~ 33					.13	NO		18	
G 62	2		P22-4					.13	NO		17	A
			P32-4					.13	NO		18	
G 63	2		P22-12					.13	NO		17	A
			P32-12					.13	NO		18	
G 64	2		P22-~~37~~ 74					.13	NO		17	A
			P32-~~37~~ 74					.13	NO		18	
G 65	2		P22-14					.13	NO		17	A
			P32-14					.13	NO		18	
G 66	2		P22-29					.13	NO		17	A
			P32-29					.13	NO		18	
G 67	2		P22-30					.13	NO		17	A
			P32-30					.13	NO		18	

SIZE	CODE IDENT NO.		
A	80230	2014647	
SCALE-NONE	REV LTR	F	SHEET 21/~~20~~ OF 27

MIL 2084 9-65

WIRING HARNESS G 2014647 F

LEAD IDENT	WIRE MATL ITEM	LEAD LG	CIRCUIT PT FROM (A) TO (B)	TERM. AREA NO.	JKT STRIP LG	SHLD STRIP LG	LEAD CUT LG	INS STRIP LG	TIN	NOTE ONE, FIG	ACCESSORY ITEMS	REMARKS
G 68	2		P22-15					.13	NO		17	A
			P32-15					.13	NO		18	
G 69	2		P22-28					.13	NO		17	A
			P32-28					.13	NO		18	
G 70	2		P22-50					.13	NO		17	A
			P32-50					.13	NO		18	
G 71	2		P22-51					.13	NO		17	A
			P32-51					.13	NO		18	
G 72	2		P22-76					.13	NO		17	A
			P32-76					.13	NO		18	
G 73	2		P22-75					.13	NO		17	A
			P32-75					.13	NO		18	
G 74	2		P22-49					.13	NO		17	A
			P32-49					.13	NO		18	
G 75	2		P22-55					.13	NO		17	A
			P32-55					.13	NO		18	
G 76	2		P22-56					.13	NO		17	A
			P32-56					.13	NO		18	
G 77	2		P22-~~44~~ 43					.13	NO		17	A
			P32-~~44~~ 43					.13	NO		18	
G 78	2		P22-~~44~~ 44					.13	NO		17	A
			P32-~~44~~ 44					.13	NO		18	
G 79	2		P22-54					.13	NO		17	A
			P32-54					.13	NO		18	

SIZE	CODE IDENT NO.		
A	80230	2014647	
SCALE-NONE	REV LTR	F	SHEET 22/~~21~~ OF 27

MIL 2084 9-65

WIRING HARNESS G 2014647 F

LEAD IDENT	WIRE MATL ITEM	LEAD LG	CIRCUIT PT FROM (A) TO (B)	TERM. AREA NO.	JKT STRIP LG	SHLD STRIP LG	LEAD CUT LG	INS STRIP LG	TIN	NOTE ONE, FIG	ACCESSORY ITEMS	REMARKS
G 80	2		P22-59					.13	NO		17	A
			P32-59					.13	NO		18	
G 81	2		P22-~~34~~ 34					.13	NO		17	A
			P32-~~34~~ 34					.13	NO		18	
G 82	2		P22-83					.13	NO		17	A
			P32-83					.13	NO		18	
G 83	2		P22-~~82~~ 57					.13	NO		17	A
			P32-~~82~~ 57					.13	NO		18	
G 84	2		P22-58					.13	NO		17	A
			P32-58					.13	NO		18	
G 85	2		P22-39					.13	NO		17	A
			P32-39					.13	NO		18	
G 86	2		P22-~~63~~ 35					.13	NO		17	A
			P32-~~63~~ 35					.13	NO		18	
G 87	2		P22-64					.13	NO		17	A
			P32-64					.13	NO		18	
G 88	2		P22-65					.13	NO		17	A
			P32-65					.13	NO		18	
G 89	2		P22-40					.13	NO		17	A
			P32-40					.13	NO		18	
G 90	2		P22-32					.13	NO		17	A
			P32-32					.13	NO		18	
G 91	2		P22-31					.13	NO		17	A
			P32-31					.13	NO		18	

SIZE	CODE IDENT NO.		
A	80230	2014647	
SCALE-NONE	REV LTR	F	SHEET 23/~~22~~ OF 27

MIL 2084 9-65

WIRING HARNESS G 2014647 F

LEAD IDENT	WIRE MATL ITEM	LEAD LG	CIRCUIT PT FROM (A) TO (B)	TERM. AREA NO.	JKT STRIP LG	SHLD STRIP LG	LEAD CUT LG	INS STRIP LG	TIN	NOTE ONE, FIG	ACCESSORY ITEMS	REMARKS
G 92	2		P22-~~45~~ 78					.13	NO		17	A
			P32-~~45~~ 78					.13	NO		18	
G 93	2		P22-~~46~~ 42					.13	NO		17	A
			P32-~~46~~ 42					.13	NO		18	
G 94	2		P22-~~39~~ 41					.13	NO		17	A
			P32-~~39~~ 41					.13	NO		18	
G 95	2		P22-~~38~~ 38					.13	NO		17	A
			P32-~~38~~ 38					.13	NO		18	
G 96	5											
G 96R			P20-26					.13	NO		18	
			P29-K18					.18	NO		21	BRANCH 2
G 96Y			P20-47					.13	NO		18	
			P29-H18					.18	NO		21	BRANCH 2
G 97	5											
G 97R			P20-13					.13	NO		18	
			P29-H19					.18	NO		21	BRANCH 2
G 97Y			P20-27					.13	NO		18	
			P29-K19					.18	NO		21	BRANCH 2
G 98	5											
G 98R			P20-51					.13	NO		18	
			P29-K20					.18	NO		21	BRANCH 2

SIZE	CODE IDENT NO.		
A	80230	2014647	
SCALE-NONE	REV LTR	F	SHEET 24/~~23~~ OF 27

MIL 2084 9-65

WIRING HARNESS G 2014647 F

LEAD IDENT	WIRE MATL ITEM	LEAD LG	CIRCUIT PT FROM (A) TO (B)	TERM. AREA NO.	JKT STRIP LG	SHLD STRIP LG	LEAD CUT LG	INS STRIP LG	TIN	NOTE ONE, FIG	ACCESSORY ITEMS	REMARKS
G 98Y			P20-29					.13	NO		18	
			P29-H20					.18	NO		21	BRANCH 2
G 99	1		P20-62					.13	NO		18	
			P29-D19					.18	NO		20	BRANCH 2
G 100	2		P22-60					.13	NO		17	A
			P32-60					.13	NO		18	
G 101	2		P22-36					.13	NO		17	A
			P32-36					.13	NO		18	
G 102	2		P22-37					.13	NO		17	A
			P32-37					.13	NO		18	
G 103	2		P22-61					.13	NO		17	A
			P32-61					.13	NO		18	
G 104	2		P22-69					.13	NO		17	A
			P32-69					.13	NO		18	
G 105	2		P22-68					.13	NO		17	A
			P32-68					.13	NO		18	
G 106	2		P22-67					.13	NO		17	A
			P32-67					.13	NO		18	
G 107	2		P22-66					.13	NO		17	A
			P32-66					.13	NO		18	
G 112	5											
G 112R			P21-41					.13	NO		18	
			P29-A3					.18	NO		21	BRANCH # 1

SIZE	CODE IDENT NO.	
A	80230	2014647
SCALE-NONE	REV LTR F	SHEET 25 ~~24~~ OF 27

MIL 2084 9-65

WIRING HARNESS G 2014647 F

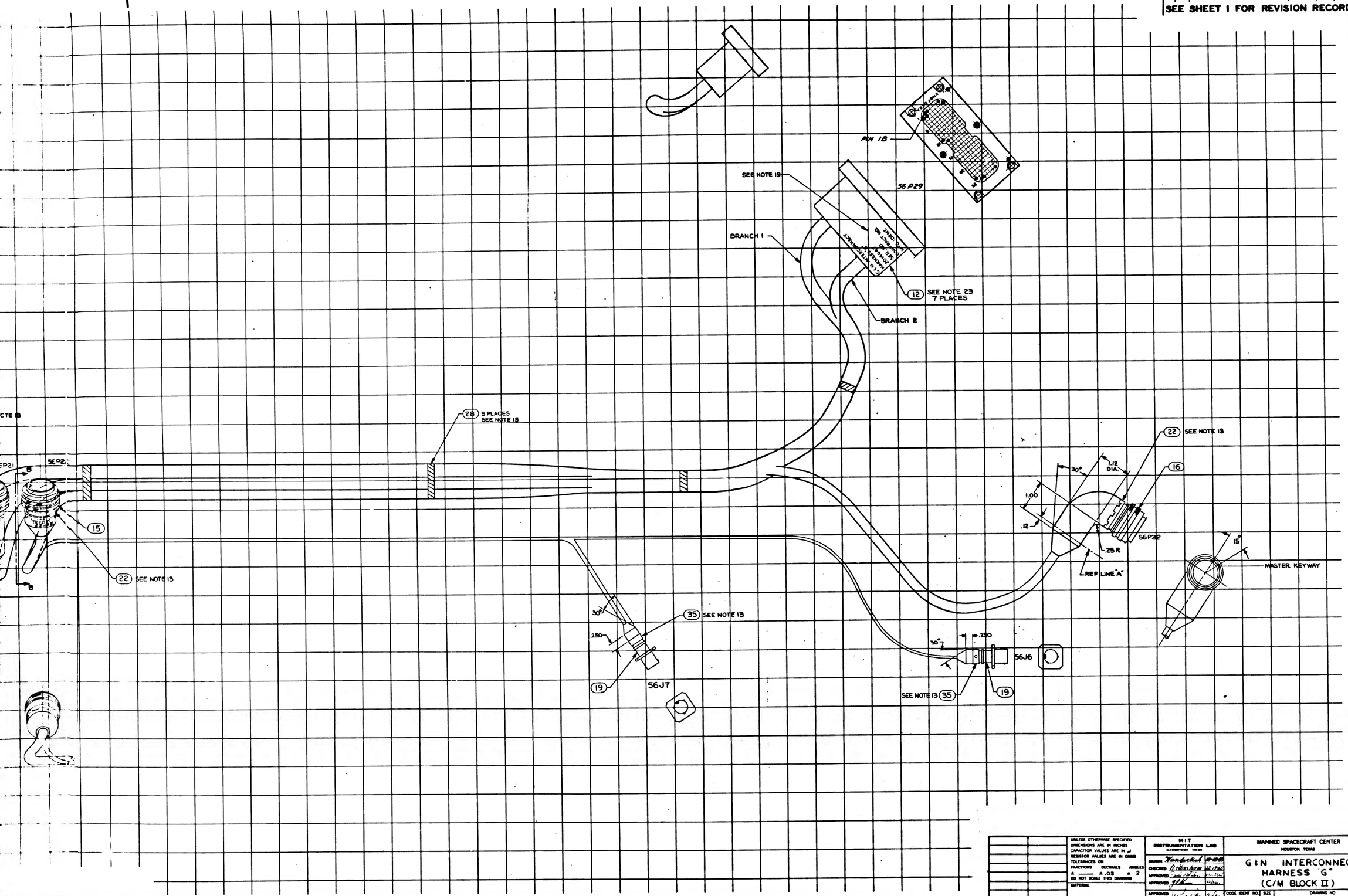
LEAD IDENT	WIRE MATL ITEM	LEAD LG	CIRCUIT PT FROM (A) TO (B)	TERM. AREA NO.	JKT STRIP LG	SHLD STRIP LG	LEAD CUT LG	INS STRIP LG	TIN	NOTE ONE, FIG	ACCESSORY ITEMS	REMARKS
G 112Y			P21-22					.13	NO		18	
			P29-B3					.18	NO		21	BRANCH # 1
G 113	2		P20-12					.13	NO		18	
			P29-K21					.18	NO		21	BRANCH 2
G 114	2		P20-77					.13	NO		18	
			P29-D21					.18	NO		21	BRANCH 2
G 115	3											
G 115R			J6-1					.13	NO		18	
			P29-A19					.18	NO		20	BRANCH 2
G 115Y			J6-2					.13	NO		18	
			P29-B19					.18	NO		20	BRANCH 2
G 116	3											
G 116R			J7-1					.13	NO		18	
			P29-A18					.18	NO		20	BRANCH 2
G 116Y			J7-2					.13	NO		18	
			P29-B18					.18	NO		20	BRANCH 2
G 117	2		P22-77					.13	NO		17	A
			P32-68					.13	NO		18	
G 118	2		P22-52					.13	NO		17	A
			P32-52					.13	NO		18	
G 119	2		P21-55					.13	NO		18	
			P29-A5					.18	NO		21	BRANCH 1
G 120	38		E35					.19	NO		37	A
			P32-81					.13	NO		18	

SIZE	CODE IDENT NO.	
A	80230	2014647
SCALE-NONE	REV LTR F	SHEET 26 ~~25~~ OF 27

MIL 2084 9-65

REVISIONS REV F				
SYM	ZONE	DESCRIPTION	DATE	APPD
		CHG NO		

SEE SHEET 1 FOR REVISION RECORD



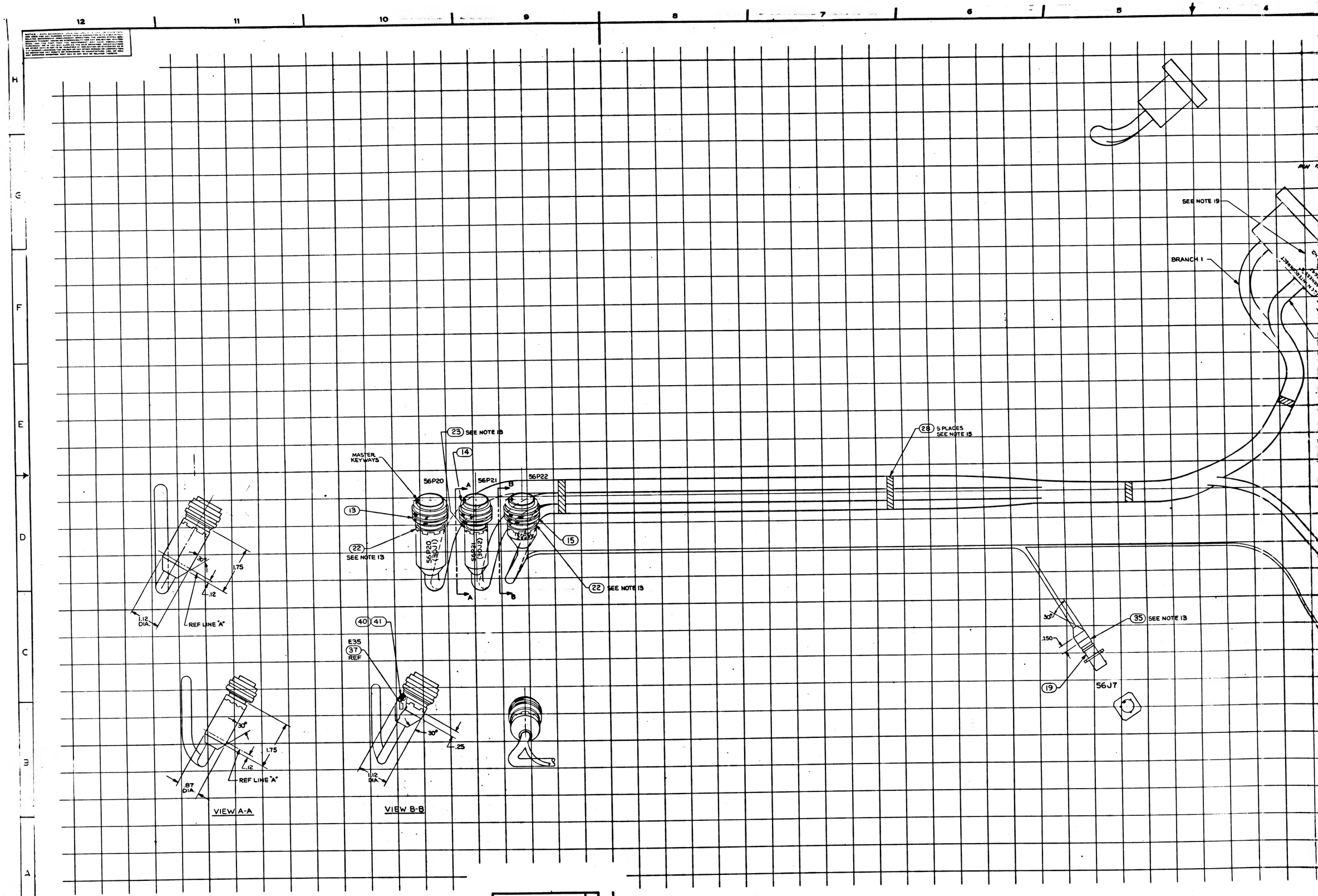
NEXT ASSY	USED ON	UNLESS OTHERWISE SPECIFIED DIMENSIONS ARE IN INCHES CAPACITOR VALUES ARE IN μf RESISTOR VALUES ARE IN OHMS TOLERANCES ON FRACTIONS ± DECIMALS ± .03 ANGLES ± 2 DO NOT SCALE THIS DRAWING MATERIAL	MIT INSTRUMENTATION LAB CAMBRIDGE MASS
APPLICATION			DRAWN CHECKED APPROVED APPROVED MIT APPROVED MSC

MANNED SPACECRAFT CENTER HOUSTON, TEXAS

G&N INTERCONNECT HARNESS "G" (C/M BLOCK II)

CODE IDENT NO	SIZE	DRAWING NO
80230	J	2014647

SCALE FULL SHEET 27 OF 27


SEE NOTE 19
BRANCH 1
23 SEE NOTE 13
MASTER KEYWAYS
14
56P20
56P21
56P22
A
B
13
22
SEE NOTE 13
56P20 (36J1)
56P21 (36J2)
15
22 SEE NOTE 13
28 5 PLACES SEE NOTE 15
1.75
.12
1.12 DIA.
REF LINE "A"
30°
.87 DIA.
VIEW A-A
40 41
E35
37 REF
.25
VIEW B-B
35 SEE NOTE 13
.250
19
56J7

2014647 F

NOTE NUMBER	GENERAL NOTES DESCRIPTION
1	SHIELD TERMINATION FIGURES ARE PER ND1002071 FOR FIGURE 6B AND ND 1002032 FOR FIGURE 7.
2	INTERPRET DRAWING IN ACCORDANCE WITH STANDARDS PRESCRIBED BY MIL-D-70327.
3	INTERCONNECT LIST FOR THIS HARNESS IS 2014677.
4	PARTIAL CIRCUIT POINTS ARE SHOWN. PREFIX WITH UNIT NUMBER 56 FOR COMPLETE CIRCUIT POINT.
5	THE SUFFIX LETTER OF A CONDUCTOR IDENTIFICATION NUMBER IDENTIFIES A SHIELD LEAD, COLOR, OR MARKED LETTER. A - FROM END OF SHIELD B - TO END OF SHIELD G - GREEN K - BLACK L - BLUE N - BROWN R - RED W - WHITE Y - YELLOW
6	ASTERISK DENOTES LOWER CASE LETTER.
7	GRID MODULE ON PICTURE SHEET IS 1 INCH TRUE POSITION.
8	UNLESS OTHERWISE SPECIFIED FEATURE CENTERLINES ON PICTURE SHEET ARE LOCATED WITHIN + OR - .25. ENDS OF HOOKUP WIRES OR ACCESSORIES ARE LOCATED WITHIN .12.
9	VENDOR ITEM - SEE SOURCE CONTROL OR SPECIFICATION CONTROL DRAWING.
10	CRIMP CONTACTS PER ND1002032.

SIZE	CODE IDENT NO.	
A	80230	2014647
SCALE-NONE	REV LTR F	SHEET 2 OF 27

MIL 2084 9-65

NOTE NUMBER	GENERAL NOTES DESCRIPTION
11	ALL UNUSED ~~[illegible]~~ CONTACT CAVITIES SHALL BE FILLED WITH A CONTACT OR CONTACT AND SEALING PLUG AS FOLLOWS CONNECTOR 56P22, USE ITEM NUMBERS 17 AND 24. CONNECTOR 56P29, USE ITEM NUMBER 20. CONNECTORS 56P20,21, AND 32, USE ITEM NUMBERS 18 AND 24.
12	LACE HARNESS PER ND1002032 USING ITEM NUMBER 26.
13	A SMALL QUANTITY OF POTTING COMPOUND MUST BE PUT BETWEEN THE THREADED PORTION OF CONNECTOR AND SILICONE RUBBER GROMMET TO SEAL AND BOND RING TO CONNECTOR PRIOR TO POTTING.
14	ALL SHIELDED TERMINATIONS SHALL BE LOCATED BELOW REFERENCE LINE A. THERE SHALL BE NO EXPOSED CONDUCTORS AT THE SURFACE OF THE POTTING COMPOUND.
15	BEFORE LACING HARNESS, APPLY 2 TURNS OF TAPE, TO INDICATE CABLE CLAMP LOCATION.
16	WRAP TAPE AROUND HARNESS IN AREA SHOWN AS REQUIRED TO BUILD UP DIAMETER TO FIT ~~CABLE CLAMP~~. SHELL HOLE.
17	MARK CONNECTOR WITH REFERENCE DESIGNATION AS SHOWN .12 HIGH, BLACK, HOT IMPRESSION STAMPING PER ND1002019, CENTRALIZE.
19	MARK CHARACTERS .12 HIGH, BLACK, PER ND1002019, SERIALIZE PER ND1002023.
20	CONTINUITY TEST PER CONDUCTOR CHART. RESISTANCE SHALL BE LESS THAN 1/2 OHM. TEST PER MIL-STD-202, METHOD 303.

SIZE	CODE IDENT NO.	
A	80230	2014647
SCALE-NONE	REV LTR F	SHEET 3 OF 27

MIL 2084 9-65

APPLICATION		REVISIONS			
NEXT ASSY	USED ON	SYM	DESCRIPTION	DATE	APPROVAL
2014567-011	2014567-011	E	REPLACES REV (D) WITH CHANGE PER MXC 207377	8 DEC 65	[illegible]
		F	ADDED CONFIGURATION AND CHANGED PER TDRR 5-12-72		
		G	Revised per TDRR 25306	7/14/76	[illegible]

REPLACES REV D WITH CHANGE

REV	F	F	F	F	F	F														
SHEET	20	21	22	23	24	25	26	27												
REV STATUS REV									G	F	F	F	F	F	F	F	F	F	F	F
OF SHEETS SHEET									1	2	3	4	5	6	7	8	9	10	11	12

MIT INSTRUMENTATION LAB Cambridge, Mass. CONTRACT

MANNED SPACECRAFT CENTER HOUSTON, TEXAS

G & N INTERCONNECT HARNESS "G" (C/M, BLOCK II)

DRAWN [illegible] DATE 26 MAY 65
CHECKED [illegible] 28 MAY 65
APPROVAL [illegible] 28 MAY 65
APPROVAL [illegible] 28 MAY 65
A. C. METZGER
NASA APPROVAL
MIT APPROVAL [illegible]
CONTRACT NAS 9-497

CODE IDENT NO. 80230 | SIZE A | 2014647 | REV G
SCALE — | SHEET 1 OF 27

NOTE NUMBER	GENERAL NOTES DESCRIPTION
21	INSULATION RESISTANCE SHALL BE GREATER THAN 100 MEGOHMS WITH 500 VDC APPLIED BETWEEN A. THE ASSEMBLY PINS AND STRUCTURE GROUND, EXCEPT THOSE PINS ELECTRICALLY CONNECTED TO STRUCTURE GROUND. B. EACH PIN AND ALL OTHER PINS NOT ELECTRICALLY CONNECTED, INCLUDING ALL SPARE PINS. TEST PER MIL-STD-202, METHOD 302, EXCEPT ELECTRIFICATION TIME NOT APPLICABLE.
22	PRESEAL BACK OF CONNECTOR P29 PRIOR TO ENCAPSULATION PER ND1002187 TYPE III USING ITEMS 31, 32, 33, and 34.
23	ENCAPSULATE BACK OF CONNECTORS PER ND1002236 USING ITEMS 29 and 30.
24	CONDUCTORS SHALL ENTER CONNECTOR 56P29 THROUGH THE APPROPRIATE BRANCH SPECIFIED IN THE REMARKS COLUMN.
25	GROUP SHIELDING - THREAD ONE CONTINUOUS LENGTH OF GROUND WIRE, ITEM 38, THROUGH CENTER OF EMI/RFI SHIELDING TAPE, ITEM 39. ALLOW 6 INCHES OF GROUND WIRE TO EXTEND BEYOND ENDS OF SHIELDING TAPE. WRAP CABLE WITH ONE CONTINUOUS LENGTH OF PREPARED SHIELDING. SUCCESSIVE TURNS SHALL OVERLAP BY APPROXIMATELY 1/2 THE WIDTH OF THE TAPE, WITH A MINIMUM OF RIDGES AND FOLDS.
26	COMPLETELY COVER SHIELD WITH ONE CONTINUOUS WRAP OF INSULATION TAPE, ITEM 27. SUCCESSIVE TURNS SHALL OVERLAP BY APPROXIMATELY 1/2 THE WIDTH OF THE TAPE WITH A MINIMUM OF RIDGES AND FOLDS.
27	ASSEMBLE INSULATION TUBING, ITEM 42, OVER GROUND WIRE AS REQUIRED TO REACH TERMINATION. ASSEMBLE SHRINK SLEEVING AS SHOWN.

MANNED SPACECRAFT CENTER HOUSTON, TEXAS	SIZE	
	A	2014647
SCALE-NONE	REV LTR F	SHEET 4 of 27

MIL 2084 4-63

SEE NOTE — LIST OF MATERIALS

NUMBER	ITEM	QTY	PART NO.	DESCRIPTION
	1	1	2014647- 1	WIRE PER 1010789-006, 22 AWG, YEL, 5 FT TOT LG
	2	1	2014647- 2	WIRE PER 1010789-016, 26 AWG, YEL, 265 FT TOT LG
	3	1	2014647- 3	WIRE PER 1010789-008, 22 AWG, YEL, RED, 15 FT TOT LG
	4	1	2014647- 4	WIRE PER 1010789-003, 24 AWG, YEL, RED, 5 FT TOT LG
	5	1	2014647- 5	WIRE PER 1010789-017, 26 AWG, YEL, RED, 75 FT TOT LG
	6	1	2014647- 6	WIRE PER 1010789-009, 22 AWG, YEL, RED, GRN, 5 FT TOT LG
	7	1	2014647- 7	WIRE PER 1010789-004, 24 AWG, YEL, RED, GRN, 5 FT TOT LG
	8	1	2014647- 8	WIRE PER 1010789-018, 26 AWG, YEL, RED, GRN, 5 FT TOT LG
	9	1	2014647- 9	WIRE PER 1010789-019, 26 AWG, YEL, RED, GRN, BRN, 5 FT TOT LG
	10	1	2014647- 10	WIRE PER 1010789-015, 26 AWG, YEL, RED, YEL JKT, 60 FT TOT LG
	11	1	2014647- 11	WIRE PER 1010789-002, 24 AWG, BLK, 15 FT TOT LG
	12	1	2014747-011	CONNECTOR, PLUG, ELECTRICAL (56P29)
9	13	1	1010929-002	CONNECTOR, PLUG, ELECTRICAL (56P20)
9	14	1	1010929-008	CONNECTOR, PLUG, ELECTRICAL (56P21)

SIZE	CODE IDENT NO.	
A	80230	2014647
SCALE-NONE	REV LTR F	SHEET 6 OF 27

MIL 2084 9-65

SEE NOTE — LIST OF MATERIALS

NUMBER	ITEM	QTY	PART NO.	DESCRIPTION
9	15	1	1010929-101	CONNECTOR, PLUG, ELECTRICAL (56P22)
9	16	1	1010929-001	CONNECTOR, PLUG, ELECTRICAL (56P32)
9	17	REF	1010770- 1	CONTACT, PIN, SUPPLIED WITH CONNECTOR 1010929
9	18	REF	1010770- 2	CONTACT, SOCKET, SUPPLIED WITH CONNECTORS 1010929 AND 1010930
9	19	2	1010930-017	CONNECTOR, RECEPTACLE, ELECTRICAL (56J6, 56J7)
9	20	105	1010955- 1	CONTACT, MALE
9	21	77	1010955- 2	CONTACT, MALE
	22	3	2014670- 4	ADAPTER, CONNECTOR
	23	1	2014670- 5	ADAPTER, CONNECTOR
9	24	110	1010958- 1	PLUG, PROTECTIVE SEALING
9	25	15	1010402- 2	SLEEVE, SOLDER
9	26	AR	1012507- 4	TAPE, LACING
	27	AR	MIL-T-23594	TAPE, TEFLON, TYPE II, 1 INCH WIDE
	28	AR	MIL-T-23594	TAPE, TEFLON, TYPE II, 1/4 INCH WIDE
9	29	AR	1012503	COMPOUND, POTTING, POLYURETHANE
9	30	AR	1012504	PRIMER, METAL PARTS
9	31	AR	1006277	SILICA, PULVERIZED, PYROGENIC
9	32	AR	1008822	COLORANT, EPOXY BASE

SIZE	CODE IDENT NO.	
A	80230	2014647
SCALE-NONE	REV LTR F	SHEET 7 OF 27

MIL 2084 9-65

NOTE NUMBER — GENERAL NOTES — DESCRIPTION

28 LEAD TOLERANCE CHART

	LEAD LG	JKT STRIP LG	SHIELD STRIP LG	LEAD CUT LG	INS STRIP LG
UNDER 3 INCHES	+ .12-.00	+.06-.06	+.06-.06	+.06-.06	+.06-.00
3 INCH TO 3 FT	+ .50-.00	+.25-.25	+.25-.25	+.25-.25	
3 FT TO 10 FT	+1.00-.00				
10 FT AND OVER	+2.00-.00				

29 Perform Workmanship Vibration:

A. Sinusoidal sweep at 3.5 g rms. Limited to 0.3 inch peak to peak displacement, from 10 to 2000 cps at a rate of 4 octaves per minute.

B. Vibration along the X axis of the space craft.

C. Monitor for discontinuities of 10μ seconds or greater during vibration.

D. Complete continuity and insulation resistance testing must be accomplished after vibration.

MANNED SPACECRAFT CENTER HOUSTON, TEXAS	SIZE A	2014647
SCALE-NONE	REV LTR G	SHEET 5 of 27

MIL 2084 4-63

SEE NOTE — LIST OF MATERIALS

NUMBER	ITEM	QTY	PART NO.	DESCRIPTION
9	33	AR	1010661	EPOXY RESIN
9	34	AR	1010679	ADHESIVE, ACTIVATOR
	35	2	2014670-010	ADAPTER, CONNECTOR
9	36	15	1012534- 36	SLEEVING, INSULATION (HEAT SHRINKABLE)
	37	1	MS17182-2	TERMINAL LUG
	38	1	2014647-012	WIRE PER QQ-W-343, TYPE C, CLASS C, 22AWG, 16 FT TOT LG
	39	AR	1010989	TAPE, SHIELDING, EMI/RFI
	~~XXXX~~	~~XX~~	~~XXXXXXXXXX~~	~~XXXXXXXXXXXXXXXXXXXX~~
	40	1	1006783-93	SCREW, BUTTON HD
	41	1	MS35333-69	WASHER, LOCK
	42	AR	1006776-44	INSULATION SLEEVING

SIZE	CODE IDENT NO.	
A	80230	2014647
SCALE-NONE	REV LTR F	SHEET 8 OF 27

MIL 2084 9-65

WIRING HARNESS G 2014647 F

LEAD IDENT	WIRE MATL ITEM	LEAD LG	CIRCUIT PT FROM (A) TO (B)	TERM. AREA NO.	JKT STRIP LG	SHLD STRIP LG	LEAD CUT LG	INS STRIP LG	TIN	NOTE ONE, FIG	ACCESSORY ITEMS	REMARKS
G 7	10				1.75 1.00	1.50 .75				7 6B	36 25	
G 7B	11		P29-F2 SHLD G7					.18 .20	NO NO		20	BRANCH 1
G 7R			P21-39 P29-G2					.13 .18	NO NO		18 21	BRANCH 1
G 7Y			P21-38 P29-H2					.13 .18	NO NO		18 21	BRANCH 1
G 8	10				1.75 1.00	1.50 .75				7 6B	36 25	
G 8B	11		P29-F1 SHLD G8					.18 .20	NO NO		20	BRANCH 1
G 8R			P21-37 P29-G1					.13 .18	NO NO		18 21	BRANCH 1
G 8Y			P21-61 P29-H1					.13 .18	NO NO		18 21	BRANCH 1
G 9	5											
G 9R			P21-9 P29-B4					.13 .18	NO NO		18 21	BRANCH 1
G 9Y			P21-21 P29-A4					.13 .18	NO NO		18 21	BRANCH 1

SIZE	CODE IDENT NO.	
A	80230	2014647
SCALE-NONE	REV LTR F	SHEET 10 OF 27

MIL 2084 9-65

WIRING HARNESS G 2014647 F

LEAD IDENT	WIRE MATL ITEM	LEAD LG	CIRCUIT PT FROM (A) TO (B)	TERM. AREA NO.	JKT STRIP LG	SHLD STRIP LG	LEAD CUT LG	INS STRIP LG	TIN	NOTE ONE, FIG	ACCESSORY ITEMS	REMARKS
G 11	10				1.75 1.00	1.50 .75				7 6B	36 25	
G 11B	11		P29-C6 SHLD G11					.18 .20	NO NO		20	BRANCH 1
G 11R			P21-17 P29-B6					.13 .18	NO NO		18 21	BRANCH 1
G 11Y			P21-16 P29-A6					.13 .18	NO NO		18 21	BRANCH 1
G 12	10				1.75 1.00	1.50 .75				7 6B	36 25	
G 12B	11		P29-D2 SHLD G12					.18 .20	NO NO		20	BRANCH 1
G 12R			P21-59 P29-C2					.13 .18	NO NO		18 21	BRANCH 1
G 12Y			P21-36 P29-B2					.13 .18	NO NO		18 21	BRANCH 1

SIZE	CODE IDENT NO.	
A	80230	2014647
SCALE-NONE	REV LTR F	SHEET 10 OF 27

MIL 2084 9-65

WIRING HARNESS G 2014647 F

LEAD IDENT	WIRE MATL ITEM	LEAD LG	CIRCUIT PT FROM (A) TO (B)	TERM. AREA NO.	JKT STRIP LG	SHLD STRIP LG	LEAD CUT LG	INS STRIP LG	TIN	NOTE ONE, FIG	ACCESSORY ITEMS	REMARKS
G 1	5											
G 1R			P21-51 P29-H5					.13 .18	NO NO		18 21	BRANCH 1
G 1Y			P21-29 P29-K5					.13 .18	NO NO		18 21	BRANCH 1
G 2	5											
G 2R			P21-53 P29-K3					.13 .18	NO NO		18 21	BRANCH 1
G 2Y			P21-52 P29-K4					.13 .18	NO NO		18 21	BRANCH 1
G 3	5											
G 3R			P21-28 P29-K7					.13 .18	NO NO		18 21	BRANCH 1
G 3Y			P21-49 P29-K6					.13 .18	NO NO		18 21	BRANCH 1
G 6	5											
G 6R			P21-3 P29-G11					.13 .18	NO NO		18 21	BRANCH 1
G 6Y			P21-10 P29-H11					.13 .18	NO NO		18 21	BRANCH 1

SIZE	CODE IDENT NO.	
A	80230	2014647
SCALE-NONE	REV LTR F	SHEET 9 OF 27

MIL 2084 9-65

WIRING HARNESS G 2014647 F

LEAD IDENT	WIRE MATL ITEM	LEAD LG	CIRCUIT PT FROM (A) TO (B)	TERM. AREA NO.	JKT STRIP LG	SHLD STRIP LG	LEAD CUT LG	INS STRIP LG	TIN	NOTE ONE, FIG	ACCESSORY ITEMS	REMARKS
G 13	10				1.75 1.00	1.50 .75				7 6B	36 25	
G 13B	11		P29-D1 SHLD G13					.18 .20	NO NO		20	BRANCH 1
G 13R			P21-57 P29-B1					.13 .18	NO NO		18 21	BRANCH 1
G 13Y			P21-58 P29-C1					.13 .18	NO NO		18 21	BRANCH 1
G 14	5											
G 14R			P21-42 P29-K9					.13 .18	NO NO		18 21	BRANCH 1
G 14Y			P21-43 P29-H9					.13 .18	NO NO		18 21	BRANCH 1
G 15	5											
G 15R			P21-24 P29-G9					.13 .18	NO NO		18 21	BRANCH 1
G 15Y			P21-44 P29-G10					.13 .18	NO NO		18 21	BRANCH 1
G 16	5											
G 16R			P21-46 P29-H10					.13 .18	NO NO		18 21	BRANCH 1

SIZE	CODE IDENT NO.	
A	80230	2014647
SCALE-NONE	REV LTR F	SHEET 11 OF 27

MIL 2084 9-65

WIRING HARNESS G 2014647 F

LEAD IDENT	WIRE MATL ITEM	LEAD LG	CIRCUIT PT FROM (A) TO (B)	TERM. AREA NO.	JKT STRIP LG	SHLD STRIP LG	LEAD CUT LG	INS STRIP LG	TIN	NOTE ONE, FIG	ACCESSORY ITEMS	REMARKS
G 20R			P20-3					.13	NO		18	
			P29-G24					.18	NO		21	BRANCH 2
G 20Y			P20-11					.13	NO		18	
			P29-G25					.18	NO		21	BRANCH 2
G 21	5											
G 21R			P20-25					.13	NO		18	
			P29-H25					.18	NO		21	BRANCH 2
G 21Y			P20-44					.13	NO		18	
			P29-H24					.18	NO		21	BRANCH 2
G 22	4											
G 22R			P20-5					.13	NO		18	
			P29-C23					.18	NO		20	BRANCH 2
G 22Y			P20-4					.13	NO		18	
			P29-C24					.18	NO		20	BRANCH 2
G 23	7											
G 23G			P20-30					.13	NO		18	
			P29-B25					.18	NO		20	BRANCH 2
G 23R			P20-15					.13	NO		18	
			P29-C25					.18	NO		20	BRANCH 2
G 23Y			P20-14					.13	NO		18	
			P29-B24					.18	NO		20	BRANCH 2

SIZE	CODE IDENT NO.	
A	80230	2014647
SCALE-NONE	REV LTR F	SHEET 4 OF 27

MIL 2084 9-65

WIRING HARNESS G 2014647 F

LEAD IDENT	WIRE MATL ITEM	LEAD LG	CIRCUIT PT FROM (A) TO (B)	TERM. AREA NO.	JKT STRIP LG	SHLD STRIP LG	LEAD CUT LG	INS STRIP LG	TIN	NOTE ONE, FIG	ACCESSORY ITEMS	REMARKS
G 24	5											
G 24R			P20-46					.13	NO		18	
			P29-A23					.18	NO		21	BRANCH 2
G 24Y			P20-71					.13	NO		18	
			P29-B23					.18	NO		21	BRANCH 2
G 25	5											
G 25R			P20-73					.13	NO		18	
			P29-B22					.18	NO		21	BRANCH 2
G 25Y			P20-72					.13	NO		18	
			P29-A22					.18	NO		21	BRANCH 2
G 26	5											
G 26R			P20-28					.13	NO		18	
			P29-A21					.18	NO		21	BRANCH 2
G 26Y			P20-48					.13	NO		18	
			P29-B21					.18	NO		21	BRANCH 2
G 27	10				1.75	1.50				7	36	
					1.00	.75				6B	25	
G 27B	11		P29-C9					.18	NO		20	BRANCH 1
			SHLD G27					.20	NO			
G 27R			P20-80					.13	NO		18	
			P29-A9					.18	NO		21	BRANCH 1

SIZE	CODE IDENT NO.	
A	80230	2014647
SCALE-NONE	REV LTR F	SHEET 5 OF 27

MIL 2084 9-65

WIRING HARNESS G 2014647 F

LEAD IDENT	WIRE MATL ITEM	LEAD LG	CIRCUIT PT FROM (A) TO (B)	TERM. AREA NO.	JKT STRIP LG	SHLD STRIP LG	LEAD CUT LG	INS STRIP LG	TIN	NOTE ONE, FIG	ACCESSORY ITEMS	REMARKS
G 16Y			P21-25					.13	NO		18	
			P29-K10					.18	NO		21	BRANCH 1
G 17	8											
G 17G			P21-26					.13	NO		18	
			P29-G12					.18	NO		21	BRANCH 2
G 17R			P21-12					.13	NO		18	
			P29-H12					.18	NO		21	BRANCH 2
G 17Y			P21-27					.13	NO		18	
			P29-H13					.18	NO		21	BRANCH 2
G 18	5											
G 18R			P20-7					.13	NO		18	
			P29-K23					.18	NO			BRANCH 2
G 18Y			P20-8					.13	NO		18	
			P29-K22					.18	NO		21	BRANCH 2
G 19	5											
G 19R			P20-23					.13	NO		18	
			P29-F25					.18	NO		21	BRANCH 2
G 19Y			P20-24					.13	NO		18	
			P29-F24					.18	NO		21	BRANCH 2
G 20	5											

SIZE	CODE IDENT NO.	
A	80230	2014647
SCALE-NONE	REV LTR F	SHEET 3 OF 27

MIL 2084 9-65

WIRING HARNESS G 2014647 F

LEAD IDENT	WIRE MATL ITEM	LEAD LG	CIRCUIT PT FROM (A) TO (B)	TERM. AREA NO.	JKT STRIP LG	SHLD STRIP LG	LEAD CUT LG	INS STRIP LG	TIN	NOTE ONE, FIG	ACCESSORY ITEMS	REMARKS
G 27Y			P20-81					.13	NO		18	
			P29-B9					.18	NO		21	BRANCH 1
G 28	10				1.75	1.50				7	36	
					1.00	.75				6B	25	
G 28B	11		P29-C10					.18	NO		20	BRANCH 1
			SHLD G28					.20	NO			
G 28R			P20-57					.13	NO		18	
			P29-B10					.18	NO		21	BRANCH 1
G 28Y			P20-82					.13	NO		18	
			P29-A10					.18	NO		21	BRANCH 1
G 29	10				1.75	1.50				7	36	
					1.00	.75				6B	25	
G 29B	11		P29-D11					.18	NO		20	BRANCH 1
			SHLD G29					.20	NO			
G 29R			P20-85					.13	NO		18	
			P29-B11					.18	NO		21	BRANCH 1
G 29Y			P20-61					.13	NO		18	
			P29-C11					.18	NO		21	BRANCH 1
G 30	10				1.75	1.50				7	36	
					1.00	.75				6B	25	
G 30B	11		P29-D12					.18	NO		20	BRANCH 2
			SHLD G30					.20	NO			
G 30R			P20-83					.13	NO		18	
			P29-C12					.18	NO		21	BRANCH 2

SIZE	CODE IDENT NO.	
A	80230	2014647
SCALE-NONE	REV LTR F	SHEET 6 OF 27

MIL 2084 9-65

WIRING HARNESS G 2014647 F

LEAD IDENT	WIRE MATL ITEM	LEAD LG	CIRCUIT PT FROM (A) TO (B)	TERM. AREA NO.	JKT STRIP LG	SHLD STRIP LG	LEAD CUT LG	INS STRIP LG	TIN	NOTE ONE, FIG	ACCESSORY ITEMS	REMARKS
G	33R		P20-64					.13	NO		18	
			P29-C16					.18	NO		21	BRANCH 2
G	33Y		P20-39					.13	NO		18	
			P29-B16					.18	NO		21	BRANCH 2
G	35	6										
G	35G		P20-43					.13	NO		18	
			P29-C19					.18	NO		20	BRANCH 2
G	35R		P20-68					.13	NO		18	
			P29-C18					.18	NO		20	BRANCH 2
G	35Y		P20-69					.13	NO		18	
			P29-D18					.18	NO		20	BRANCH 2
G	36	3										
G	36R		P20-66					.13	NO		18	
			P29-A20					.18	NO		20	BRANCH 2
G	36Y		P20-42					.13	NO		18	
			P29-B20					.18	NO		20	BRANCH 2
G	37	5										
G	37R		P20-74					.13	NO		18	
			P29-C22					.18	NO		21	BRANCH 2
G	37Y		P20-75					.13	NO		18	
			P29-C21					.18	NO		21	BRANCH 2

SIZE	CODE IDENT NO.	
A	80230	2014647
SCALE-NONE	REV LTR F	SHEET/8 18 OF 27

MIL 2084 9-65

WIRING HARNESS G 2014647 F

LEAD IDENT	WIRE MATL ITEM	LEAD LG	CIRCUIT PT FROM (A) TO (B)	TERM. AREA NO.	JKT STRIP LG	SHLD STRIP LG	LEAD CUT LG	INS STRIP LG	TIN	NOTE ONE, FIG	ACCESSORY ITEMS	REMARKS
G	38	10			1.75	1.50				7	36	
					1.00	.75				6B	25	
G	38B	11	P29-G17					.18	NO		20	BRANCH 2
			SHLD G38					.20	NO			
G	38R		P20-79					.13	NO		18	
			P29-G15					.18	NO		21	BRANCH 2
G	38Y		P20-78					.13	NO		18	
			P29-G16					.18	NO		21	BRANCH 2
G	39	10			1.75	1.50				7	36	
					1.00	.75				6B	25	
G	39B	11	P29-H17					.18	NO		20	BRANCH 2
			SHLD G39					.20	NO			
G	39R		P20-54					.13	NO		18	
			P29-H16					.18	NO		21	BRANCH 2
G	39Y		P20-31					.13	NO		18	
			P29-H15					.18	NO		21	BRANCH 2
G	40	2	P22-1					.13	NO		17	A
			P32-1					.13	NO		18	
G	41	2	P22-5					.13	NO		17	A
			P32-5					.13	NO		18	
G	42	2	P22-6					.13	NO		17	A
			P32-6					.13	NO		18	
G	43	2	P22-16					.13	NO		17	A
			P32-16					.13	NO		18	

SIZE	CODE IDENT NO.	
A	80230	2014647
SCALE-NONE	REV LTR F	SHEET/9 18 OF 27

MIL 2084 9-65

WIRING HARNESS G 2014647 F

LEAD IDENT	WIRE MATL ITEM	LEAD LG	CIRCUIT PT FROM (A) TO (B)	TERM. AREA NO.	JKT STRIP LG	SHLD STRIP LG	LEAD CUT LG	INS STRIP LG	TIN	NOTE ONE, FIG	ACCESSORY ITEMS	REMARKS
G	30Y		P20-84					.13	NO		18	
			P29-B12					.18	NO		21	BRANCH 2
G	31	10			1.75	1.50				7	36	
					1.00	.75				6B	25	
G	31B	11	P29-D13					.18	NO		20	BRANCH 2
			SHLD G31					.20	NO			
G	31R		P20-59					.13	NO		18	
			P29-B13					.18	NO		21	BRANCH 2
G	31Y		P20-35					.13	NO		18	
			P29-C13					.18	NO		21	BRANCH 2
G	32	10			1.75	1.50				7	36	
					1.00	.75				6B	25	
G	32B	11	P29-D14					.18	NO		20	BRANCH 2
			SHLD G32					.20	NO			
G	32R		P20-34					.13	NO		18	
			P29-C14					.18	NO		21	BRANCH 2
G	32Y		P20-33					.13	NO		18	
			P29-B14					.18	NO		21	BRANCH 2
G	33	9										
G	33G		P20-22					.13	NO		18	
			P29-B15					.18	NO		21	BRANCH 2
G	33N		P20-40					.13	NO		18	
			P29-C15					.18	NO		21	BRANCH 2

SIZE	CODE IDENT NO.	
A	80230	2014647
SCALE-NONE	REV LTR F	SHEET/7 16 OF 27

MIL 2084 9-65

WIRING HARNESS G 2014647 F

LEAD IDENT	WIRE MATL ITEM	LEAD LG	CIRCUIT PT FROM (A) TO (B)	TERM. AREA NO.	JKT STRIP LG	SHLD STRIP LG	LEAD CUT LG	INS STRIP LG	TIN	NOTE ONE, FIG	ACCESSORY ITEMS	REMARKS
G	44	2	P22-17					.13	NO		17	A
			P32-17					.13	NO		18	
G	45	2	P22-18					.13	NO		17	A
			P32-18					.13	NO		18	
G	46	2	P22-19					.13	NO		17	A
			P32-19					.13	NO		18	
G	47	2	P22-7					.13	NO		17	A
			P32-7					.13	NO		18	
G	48	2	P22-8					.13	NO		17	A
			P32-8					.13	NO		18	
G	49	2	P22-20					.13	NO		17	A
			P32-20					.13	NO		18	
G	50	2	P22-2					.13	NO		17	A
			P32-2					.13	NO		18	
G	51	2	P22-9					.13	NO		17	A
			P32-9					.13	NO		18	
G	52	2	P22-21					.13	NO		17	A
			P32-21					.13	NO		18	
G	53	2	P22-22					.13	NO		17	A
			P32-22					.13	NO		18	
G	54	2	P22-23					.13	NO		17	A
			P32-23					.13	NO		18	
G	55	2	P22-10					.13	NO		17	A
			P32-10					.13	NO		18	

SIZE	CODE IDENT NO.	
A	80230	2014647
SCALE-NONE	REV LTR F	SHEET20 19 OF 27

MIL 2084 9-65

WIRING HARNESS G 2014647 F

LEAD IDENT	WIRE MATL ITEM	LEAD LG	CIRCUIT PT FROM (A) TO (B)	TERM. AREA NO.	JKT STRIP LG	SHLD STRIP LG	LEAD CUT LG	INS STRIP LG	TIN	NOTE ONE, FIG	ACCESSORY ITEMS	REMARKS
G 68	2		P22-15					.13	NO		17	A
			P32-15					.13	NO		18	
G 69	2		P22-28					.13	NO		17	A
			P32-28					.13	NO		18	
G 70	2		P22-50					.13	NO		17	A
			P32-50					.13	NO		18	
G 71	2		P22-51					.13	NO		17	A
			P32-51					.13	NO		18	
G 72	2		P22-76					.13	NO		17	A
			P32-76					.13	NO		18	
G 73	2		P22-75					.13	NO		17	A
			P32-75					.13	NO		18	
G 74	2		P22-49					.13	NO		17	A
			P32-49					.13	NO		18	
G 75	2		P22-55					.13	NO		17	A
			P32-55					.13	NO		18	
G 76	2		P22-56					.13	NO		17	A
			P32-56					.13	NO		18	
G 77	2		P22-[illegible] 43					.13	NO		17	A
			P32-[illegible] 43					.13	NO		18	
G 78	2		P22-[illegible] 44					.13	NO		17	A
			P32-[illegible] 44					.13	NO		18	
G 79	2		P22-54					.13	NO		17	A
			P32-54					.13	NO		18	

SIZE	CODE IDENT NO.		
A	80230	2014647	
SCALE-NONE	REV LTR	F	SHEET 22 OF 27

MIL 2084 9-65

WIRING HARNESS G 2014647 F

LEAD IDENT	WIRE MATL ITEM	LEAD LG	CIRCUIT PT FROM (A) TO (B)	TERM. AREA NO.	JKT STRIP LG	SHLD STRIP LG	LEAD CUT LG	INS STRIP LG	TIN	NOTE ONE, FIG	ACCESSORY ITEMS	REMARKS
G 80	2		P22-59					.13	NO		17	A
			P32-59					.13	NO		18	
G 81	2		P22-[illegible] 34					.13	NO		17	A
			P32-[illegible] 34					.13	NO		18	
G 82	2		P22-83					.13	NO		17	A
			P32-83					.13	NO		18	
G 83	2		P22-[illegible] 57					.13	NO		17	A
			P32-[illegible] 57					.13	NO		18	
G 84	2		P22-58					.13	NO		17	A
			P32-58					.13	NO		18	
G 85	2		P22-39					.13	NO		17	A
			P32-39					.13	NO		18	
G 86	2		P22-[illegible] 35					.13	NO		17	A
			P32-[illegible] 35					.13	NO		18	
G 87	2		P22-64					.13	NO		17	A
			P32-64					.13	NO		18	
G 88	2		P22-65					.13	NO		17	A
			P32-65					.13	NO		18	
G 89	2		P22-40					.13	NO		17	A
			P32-40					.13	NO		18	
G 90	2		P22-32					.13	NO		17	A
			P32-32					.13	NO		18	
G 91	2		P22-31					.13	NO		17	A
			P32-31					.13	NO		18	

SIZE	CODE IDENT NO.		
A	80230	2014647	
SCALE-NONE	REV LTR	F	SHEET 23 OF 27

MIL 2084 9-65

WIRING HARNESS G 2014647 F

LEAD IDENT	WIRE MATL ITEM	LEAD LG	CIRCUIT PT FROM (A) TO (B)	TERM. AREA NO.	JKT STRIP LG	SHLD STRIP LG	LEAD CUT LG	INS STRIP LG	TIN	NOTE ONE, FIG	ACCESSORY ITEMS	REMARKS
G 56	2		P22-24					.13	NO		17	A
			P32-24					.13	NO		18	
G 57	2		P22-3					.13	NO		17	A
			P32-3					.13	NO		18	
G 58	2		P22-11					.13	NO		17	A
			P32-11					.13	NO		18	
G 59	2		P22-[illegible] 79					.13	NO		17	A
			P32-[illegible] 79					.13	NO		18	
G 60	2		P22-13					.13	NO		17	A
			P32-13					.13	NO		18	
G 61	2		P22-[illegible] 33					.13	NO		17	A
			P32-[illegible] 33					.13	NO		18	
G 62	2		P22-4					.13	NO		17	A
			P32-4					.13	NO		18	
G 63	2		P22-12					.13	NO		17	A
			P32-12					.13	NO		18	
G 64	2		P22-[illegible] 74					.13	NO		17	A
			P32-[illegible] 74					.13	NO		18	
G 65	2		P22-14					.13	NO		17	A
			P32-14					.13	NO		18	
G 66	2		P22-29					.13	NO		17	A
			P32-29					.13	NO		18	
G 67	2		P22-30					.13	NO		17	A
			P32-30					.13	NO		18	

SIZE	CODE IDENT NO.		
A	80230	2014647	
SCALE-NONE	REV LTR	F	SHEET 21 OF 27

MIL 2084 9-65

WIRING HARNESS G 2014647 F

LEAD IDENT	WIRE MATL ITEM	LEAD LG	CIRCUIT PT FROM (A) TO (B)	TERM. AREA NO.	JKT STRIP LG	SHLD STRIP LG	LEAD CUT LG	INS STRIP LG	TIN	NOTE ONE, FIG	ACCESSORY ITEMS	REMARKS
G 92	2		P22-[illegible] 78					.13	NO		17	A
			P32-[illegible] 78					.13	NO		18	
G 93	2		P22-[illegible] 42					.13	NO		17	A
			P32-[illegible] 42					.13	NO		18	
G 94	2		P22-[illegible] 41					.13	NO		17	A
			P32-[illegible] 41					.13	NO		18	
G 95	2		P22-[illegible] 38					.13	NO		17	A
			P32-[illegible] 38					.13	NO		18	
G 96	5											
G 96R			P20-26					.13	NO		18	
			P29-K18					.18	NO		21	BRANCH 2
G 96Y			P20-47					.13	NO		18	
			P29-H18					.18	NO		21	BRANCH 2
G 97	5											
G 97R			P20-13					.13	NO		18	
			P29-H19					.18	NO		21	BRANCH 2
G 97Y			P20-27					.13	NO		18	
			P29-K19					.18	NO		21	BRANCH 2
G 98	5											
G 98R			P20-51					.13	NO		18	
			P29-K20					.18	NO		21	BRANCH 2

SIZE	CODE IDENT NO.		
A	80230	2014647	
SCALE-NONE	REV LTR	F	SHEET 24 OF 27

MIL 2084 9-65

WIRING HARNESS G 2014647 F

LEAD IDENT	WIRE MATL ITEM	LEAD LG	CIRCUIT PT FROM (A) TO (B)	TERM. AREA NO.	JKT STRIP LG	SHLD STRIP LG	LEAD CUT LG	INS STRIP LG	TIN	NOTE ONE, FIG	ACCESSORY ITEMS	REMARKS
G 98Y			P20-29					.13	NO		18	
			P29-H20					.18	NO		21	BRANCH 2
G 99	1		P20-62					.13	NO		18	
			P29-D19					.18	NO		20	BRANCH 2
G 100	2		P22-60					.13	NO		17	A
			P32-60					.13	NO		18	
G 101	2		P22-36					.13	NO		17	A
			P32-36					.13	NO		18	
G 102	2		P22-37					.13	NO		17	A
			P32-37					.13	NO		18	
G 103	2		P22-61					.13	NO		17	A
			P32-61					.13	NO		18	
G 104	2		P22-69					.13	NO		17	A
			P32-69					.13	NO		18	
G 105	2		P22-68					.13	NO		17	A
			P32-68					.13	NO		18	
G 106	2		P22-67					.13	NO		17	A
			P32-67					.13	NO		18	
G 107	2		P22-66					.13	NO		17	A
			P32-66					.13	NO		18	
G 112	5											
G 112R			P21-41					.13	NO		18	
			P29-A3					.18	NO		21	BRANCH # 1

SIZE	CODE IDENT NO.	
A	80230	2014647
SCALE-NONE	REV LTR F	SHEET 25 OF 27

MIL 2084 6-88

WIRING HARNESS G 2014647 F

LEAD IDENT	WIRE MATL ITEM	LEAD LG	CIRCUIT PT FROM (A) TO (B)	TERM. AREA NO.	JKT STRIP LG	SHLD STRIP LG	LEAD CUT LG	INS STRIP LG	TIN	NOTE ONE, FIG	ACCESSORY ITEMS	REMARKS
G 112V			P21-22					.13	NO		18	
			P29-B3					.18	NO		21	BRANCH # 1
G 113	2		P20-12					.13	NO		18	
			P29-K21					.18	NO		21	BRANCH 2
G 114	2		P20-77					.13	NO		18	
			P29-D21					.18	NO		21	BRANCH 2
G 115	3											
G 115R			J6-1					.13	NO		18	
			P29-A19					.18	NO		20	BRANCH 2
G 115V			J6-2					.13	NO		18	
			P29-B19					.18	NO		20	BRANCH 2
G 116	3											
G 116R			J7-1					.13	NO		18	
			P29-A18					.18	NO		20	BRANCH 2
G 116V			J7-2					.13	NO		18	
			P29-B18					.18	NO		20	BRANCH 2
G 117	2		P22-77					.13	NO		17	A
			P32-68					.13	NO		18	
G 118	2		P22-52					.13	NO		17	A
			P32-52					.13	NO		18	
G 119	2		P21-55					.13	NO		18	
			P29-A5					.18	NO		21	BRANCH 1
G 120	38		E35					.19	NO		57	A
			P32-81					.13	NO		18	

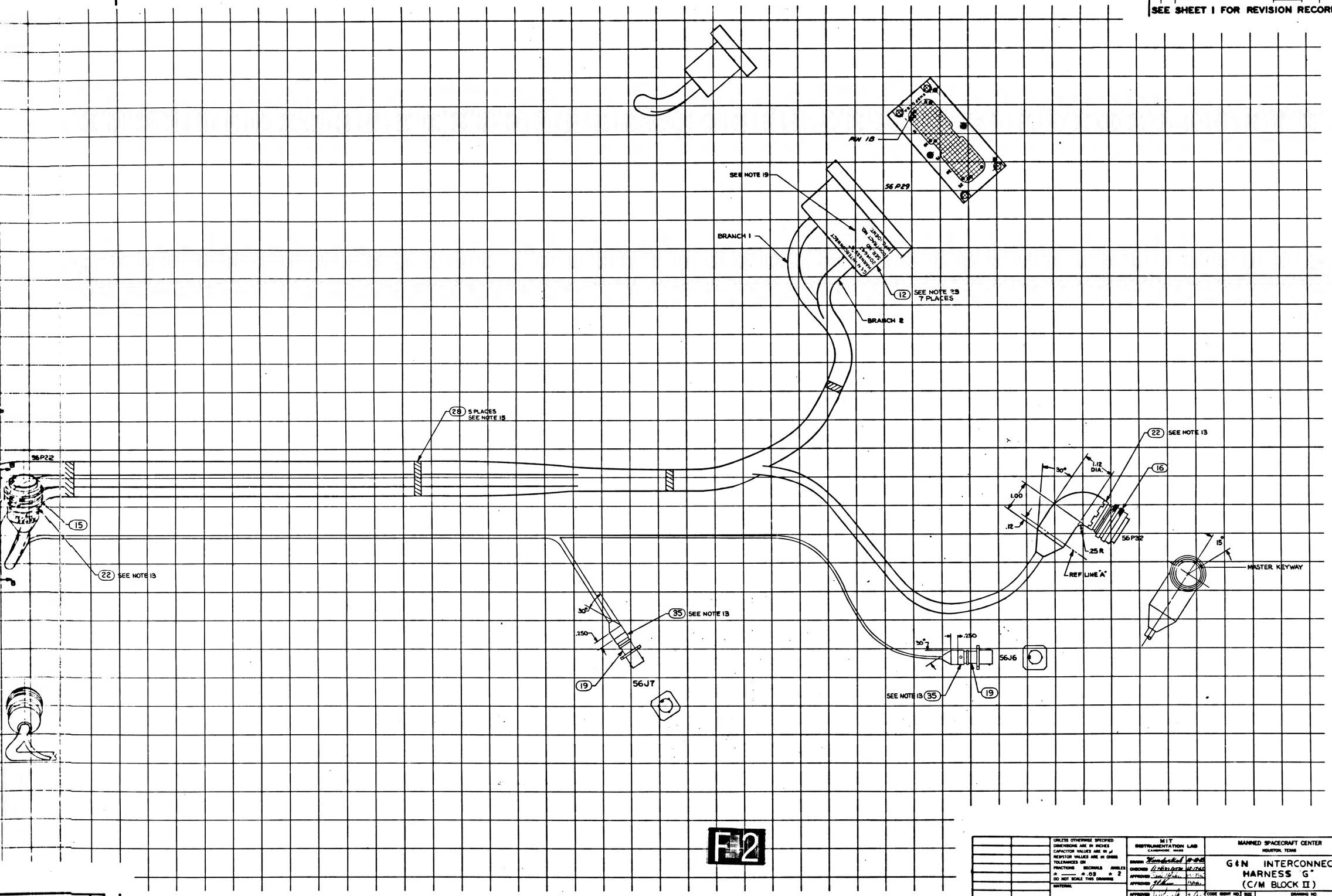
SIZE	CODE IDENT NO.	
A	80230	2014647
SCALE-NONE	REV LTR F	SHEET 26 OF 27

MIL 2084 6-88

REVISIONS REV F DWG REF 2

SYM	ZONE	DESCRIPTION	CHG NO	DATE	APPD

SEE SHEET 1 FOR REVISION RECORD



F2

NEXT ASSY	USED ON	APPLICATION	

UNLESS OTHERWISE SPECIFIED
DIMENSIONS ARE IN INCHES
CAPACITOR VALUES ARE IN μf
RESISTOR VALUES ARE IN OHMS
TOLERANCES ON
FRACTIONS ± DECIMALS ± ANGLES
± .03 ± 2
DO NOT SCALE THIS DRAWING
MATERIAL

MIT INSTRUMENTATION LAB CAMBRIDGE, MASS

DRAWN
CHECKED
APPROVED
APPROVED
APPROVED MIT
APPROVED MSC

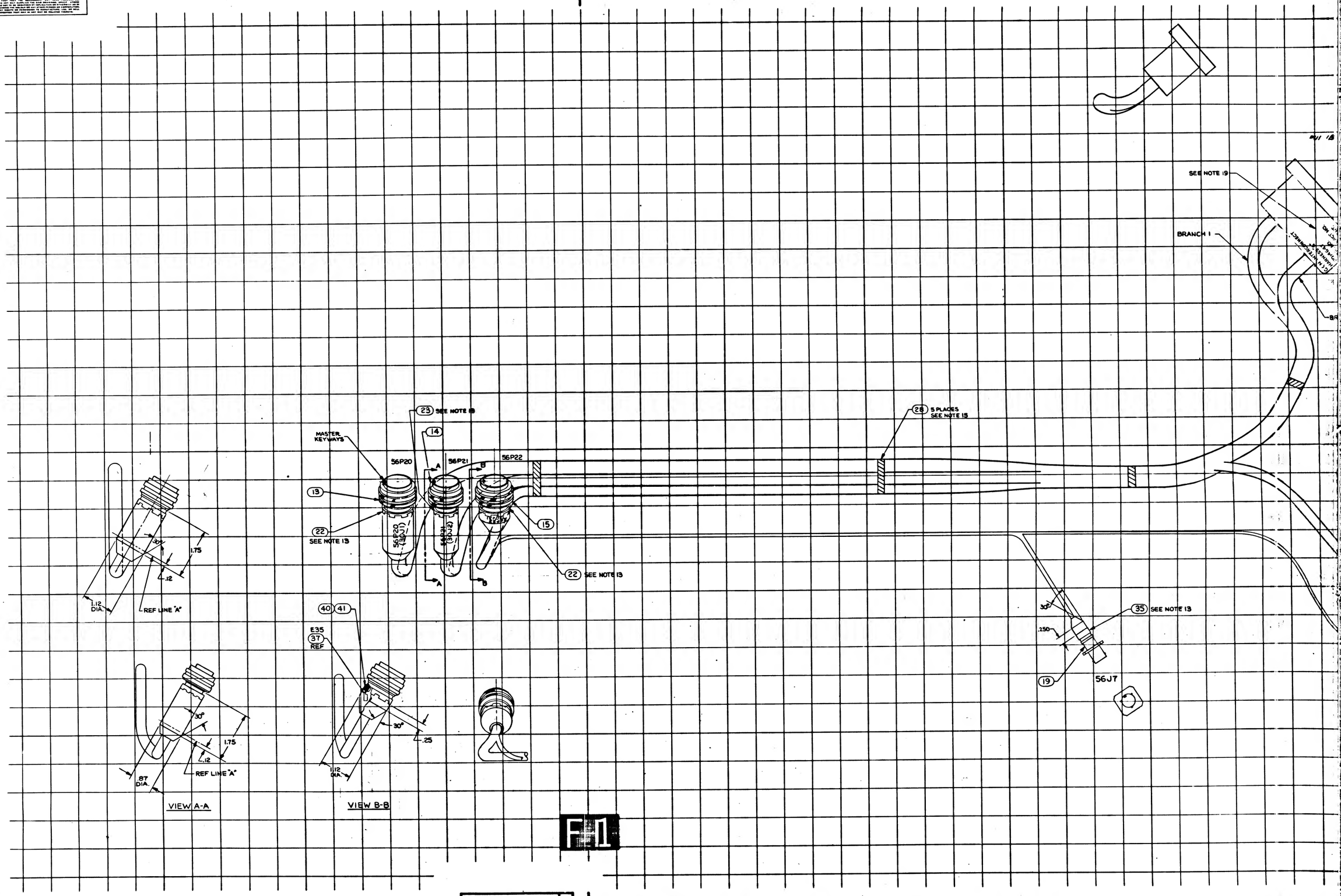
MANNED SPACECRAFT CENTER HOUSTON, TEXAS

G&N INTERCONNECT HARNESS "G" (C/M BLOCK II)

CODE IDENT NO	SIZE	DRAWING NO
80230	J	2014647

SCALE FULL SHEET 2 OF 2

2014647 F


SEE NOTE 19
BRANCH 1
23 SEE NOTE 13
14
MASTER KEYWAYS
56P20
56P21
56P22
13
22 SEE NOTE 13
15
22 SEE NOTE 13
26 5 PLACES SEE NOTE 15
35 SEE NOTE 13
19
56J7
40 41
E35
37 REF
30°
1.75
.12
1.12 DIA.
REF LINE "A"
.87 DIA.
VIEW A-A
.25
VIEW B-B
F1

2014647 F

APPLICATION		REVISIONS			
NEXT ASSY	USED ON	SYM	DESCRIPTION	DATE	APPROVAL
2014567-011	2014567-011	E	REPLACES REV (D) WITH CHANGE PER MXC 207377	8 DEC 65	RLP
		F	ADDED CONFIGURATION AND CHANGED PER TDRR 24812		
	(M)	G	Revised per TDRR 25306	2/4/66	
		H	REVISED PER TDRR 27040	24 MAR 66	JB

REPLACES REV D WITH CHANGE

REV	H	H	H	H	H	H	H	H	H	H														
SHEET	20	21	22	23	24	25	26	27	28	29														
REV STATUS	REV							H	H	H	H	H	H	H	H	H	H	H	H	H	H	H	H	H
OF SHEETS	SHEET							1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16	17	18	19

MIT
INSTRUMENTATION LAB
CAMBRIDGE, MASS
DWG. NO. CONTRACT

MANNED
SPACECRAFT CENTER
HOUSTON, TEXAS

DRAWN Janowiak DATE 26 MAY 65
CHECKED J Kaylin 28 MAY 65
APPROVAL D. Lang 29 AUG 65
APPROVAL J J Kim (GAU) DEC 29 65

G&N INTERCONNECT HARNESS "G"

(C/M, BLOCK II)

NASA APPROVAL A. C. Mitzelfelt
MIT APPROVAL W Kay 21 Dec 65

CODE IDENT NO.	SIZE		REV
80230	A	2014647	H

CONTRACT NAS 9-497 SCALE — SHEET 1 OF 29

NOTE NUMBER	GENERAL NOTES DESCRIPTION
1	SHIELD TERMINATION FIGURES ARE PER ND1002071 FOR FIGURE 6B AND ND 1002032 FOR FIGURE 7.
2	INTERPRET DRAWING IN ACCORDANCE WITH STANDARDS PRESCRIBED BY MIL-D-70327.
3	INTERCONNECT LIST FOR THIS HARNESS IS 2014677.
4	PARTIAL CIRCUIT POINTS ARE SHOWN. PREFIX WITH UNIT NUMBER 56 FOR COMPLETE CIRCUIT POINT.
5	THE SUFFIX LETTER OF A CONDUCTOR IDENTIFICATION NUMBER IDENTIFIES A SHIELD LEAD, COLOR, OR MARKED LETTER. A - FROM END OF SHIELD B - TO END OF SHIELD G - GREEN K - BLACK L - BLUE N - BROWN R - RED W - WHITE Y - YELLOW
6	ASTERISK DENOTES LOWER CASE LETTER.
7	GRID MODULE ON PICTURE SHEET IS 1 INCH TRUE POSITION.
8	UNLESS OTHERWISE SPECIFIED FEATURE CENTERLINES ON PICTURE SHEET ARE LOCATED WITHIN + OR - .25. ENDS OF HOOKUP WIRES OR ACCESSORIES ARE LOCATED WITHIN .12.
9	VENDOR ITEM - SEE SOURCE CONTROL OR SPECIFICATION CONTROL DRAWING.
10	CRIMP CONTACTS PER ND1002032.

NOTE NUMBER	GENERAL NOTES DESCRIPTION
11	ALL UNUSED CONTACT CAVITIES SHALL BE FILLED WITH A CONTACT OR CONTACT AND SEALING PLUG AS FOLLOWS CONNECTOR 56P22, USE ITEM NUMBERS 17 AND 24. CONNECTOR 56P29, USE ITEM NUMBER 20. CONNECTORS 56P20,21, AND 32, USE ITEM NUMBERS 18 AND 24.
12	LACE HARNESS PER ND1002032 USING ITEM NUMBER 26.
13	A SMALL QUANTITY OF POTTING COMPOUND MUST BE PUT BETWEEN THE THREADED PORTION OF CONNECTOR AND SILICONE RUBBER GROMMET TO SEAL AND BOND RING TO CONNECTOR PRIOR TO POTTING.
14	ALL SHIELDED TERMINATIONS SHALL BE LOCATED BELOW REFERENCE LINE A. THERE SHALL BE NO EXPOSED CONDUCTORS AT THE SURFACE OF THE POTTING COMPOUND.
15	BEFORE LACING HARNESS, APPLY 2 TURNS OF TAPE, TO INDICATE CABLE CLAMP LOCATION.
16	WRAP TAPE AROUND HARNESS IN AREA SHOWN AS REQUIRED TO BUILD UP DIAMETER TO FIT SHELL HOLE.
17	MARK CONNECTOR WITH REFERENCE DESIGNATION AS SHOWN .12 HIGH, BLACK, HOT IMPRESSION STAMPING PER ND1002019, CENTRALIZE.
19	MARK CHARACTERS .12 HIGH, BLACK, PER ND1002019, SERIALIZE PER ND1002023.
20	CONTINUITY TEST PER CONDUCTOR CHART. RESISTANCE SHALL BE LESS THAN 1/2 OHM. TEST PER MIL-STD-202, METHOD 303.

NOTE NUMBER	GENERAL NOTES DESCRIPTION
21	INSULATION RESISTANCE SHALL BE GREATER THAN 100 MEGOHMS WITH 500 VDC APPLIED BETWEEN A. THE ASSEMBLY PINS AND STRUCTURE GROUND, EXCEPT THOSE PINS ELECTRICALLY CONNECTED TO STRUCTURE GROUND. B. EACH PIN AND ALL OTHER PINS NOT ELECTRICALLY CONNECTED, INCLUDING ALL SPARE PINS. TEST PER MIL-STD-202, METHOD 302, EXCEPT ELECTRIFICATION TIME NOT APPLICABLE.
22	PRESEAL BACK OF CONNECTOR P29 PRIOR TO ENCAPSULATION PER ND1002187 TYPE III USING ITEMS 31,32,33, AND 34.
23	ENCAPSULATE BACK OF CONNECTORS PER ND1002236 USING ITEMS 29 AND 30.
24	CONDUCTORS SHALL ENTER CONNECTOR 56P29 THROUGH THE APPROPRIATE BRANCH SPECIFIED IN THE REMARKS COLUMN.
25	GROUP SHIELDING - THREAD ONE CONTINUOUS LENGTH OF GROUND WIRE, ITEM 38, THROUGH CENTER OF EMI/RFI SHIELDING TAPE, ITEM 39. ALLOW 6 INCHES OF GROUND WIRE TO EXTEND BEYOND ENDS OF SHIELDING TAPE. WRAP CABLE WITH ONE CONTINUOUS LENGTH OF PREPARED SHIELDING. SUCCESSIVE TURNS SHALL OVERLAP BY APPROXIMATELY 1/2 THE WIDTH OF THE TAPE, WITH A MINIMUM OF RIDGES AND FOLDS.
26	COMPLETELY COVER SHIELD WITH ONE CONTINUOUS WRAP OF INSULATION TAPE, ITEM 27. SUCCESSIVE TURNS SHALL OVERLAP BY APPROXIMATELY 1/2 THE WIDTH OF THE TAPE WITH A MINIMUM OF RIDGES AND FOLDS.
27	ASSEMBLE INSULATION TUBING, ITEM 42, OVER GROUND WIRE AS REQUIRED TO REACH TERMINATION. ASSEMBLE SHRINK SLEEVING AS SHOWN.

NOTE NUMBER	GENERAL NOTES DESCRIPTION
29	PERFORM WORKMANSHIP VIBRATION A. SINUSOIDAL SWEEP AT 3.5 G RMS. LIMITED TO 0.3 INCH PEAK TO PEAK DISPLACEMENT, FROM 10 TO 2000 CPS AT A RATE OF 4 OCTAVES PER MINUTE. B. VIBRATION ALONG THE X AXIS OF THE SPACE CRAFT. C. MONITOR FOR DISCONTINUITIES OF 10 MICRO SECONDS OR GREATER DURING VIBRATION. D. COMPLETE CONTINUITY AND INSULATION RESISTANCE TESTING MUST BE ACCOMPLISHED AFTER VIBRATION.

LEAD TOLERANCE CHART

	LEAD LG	JKT STRIP LG	SHIELD STRIP LG	LEAD CUT LG	INS STRIP LG
UNDER 3 INCHES	+ .12-.00	+.06-.06	+.06-.06	+.06-.06	+.06-.00
3 INCH TO 3 FT	+ .50-.00	+.25-.25	+.25-.25	+.25-.25	
3 FT TO 10 FT	+1.00-.00				
10 FT AND OVER	+2.00-.00				

SEE NOTE

LIST OF MATERIALS

NUMBER	ITEM	QTY	PART NO.	DESCRIPTION
	1	1	2014647- 1	WIRE PER 1010789-006, 22 AWG, YEL, 5 FT TOT LG
	2	1	2014647- 2	WIRE PER 1010789-016, 26 AWG, YEL, 265 FT TOT LG
	3	1	2014647- 3	WIRE PER 1010789-008, 22 AWG, YEL, RED, 15 FT TOT LG
	4	1	2014647- 4	WIRE PER 1010789-003, 24 AWG, YEL, RED, 5 FT TOT LG
	5	1	2014647- 5	WIRE PER 1010789-017, 26 AWG, YEL, RED, 75 FT TOT LG
	6	1	2014647- 6	WIRE PER 1010789-009, 22 AWG, YEL, RED, GRN, 5 FT TOT LG
	7	1	2014647- 7	WIRE PER 1010789-004, 24 AWG, YEL, RED, GRN, 5 FT TOT LG
	8	1	2014647- 8	WIRE PER 1010789-018, 26 AWG, YEL, RED, GRN, 5 FT TOT LG
	9	1	2014647- 9	WIRE PER 1010789-019, 26 AWG, YEL, RED, GRN, BRN, 5 FT TOT LG
	10	1	2014647- 10	WIRE PER 1010789-015, 26 AWG, YEL, RED, YEL JKT, 72 FT TOT LG
	11	1	2014647- 11	WIRE PER 1010789-002, 24 AWG, BLK, 15 FT TOT LG
	12	1	2014747	CONNECTOR, PLUG, ELECTRICAL (56P29)
9	13	1	1010929-002	CONNECTOR, PLUG, ELECTRICAL (56P20)
9	14	1	1010929-008	CONNECTOR, PLUG, ELECTRICAL (56P21)

SIZE	CODE IDENT NO.	
A	80230	2014647
SCALE-NONE	REV LTR H	SHEET 6 OF 29

MIL 2084 9-65

SEE NOTE

LIST OF MATERIALS

NUMBER	ITEM	QTY	PART NO.	DESCRIPTION
9	15	1	1010929-101	CONNECTOR, PLUG, ELECTRICAL (56P22)
9	16	1	1010929-001	CONNECTOR, PLUG, ELECTRICAL (56P32)
9	17	REF	1010770- 1	CONTACT, PIN, SUPPLIED WITH CONNECTOR 1010929
9	18	REF	1010770- 2	CONTACT, SOCKET, SUPPLIED WITH CONNECTORS 1010929 AND 1010930
9	19	2	1010930-017	CONNECTOR, RECEPTACLE, ELECTRICAL (56J6, 56J7)
9	20	107	1010955- 1	CONTACT, MALE
9	21	75	1010955- 2	CONTACT, MALE
	22	2	2014670- 4	ADAPTER, CONNECTOR
	23	1	2014670- 5	ADAPTER, CONNECTOR
9	24	110	1010958- 1	PLUG, PROTECTIVE SEALING
9	25	19	1010402- 2	SLEEVE, SOLDER
9	26	AR	1012507- 4	TAPE, LACING
	27	AR	MIL-T-23594	TAPE, TEFLON, TYPE II, 1 INCH WIDE
	28	AR	MIL-T-23594	TAPE, TEFLON, TYPE II, 1/4 INCH WIDE
9	29	AR	1012503	COMPOUND, POTTING, POLYURETHANE
9	30	AR	1012504	PRIMER, METAL PARTS
9	31	AR	1006277	SILICA, PULVERIZED, PYROGENIC
9	32	AR	1008822	COLORANT, EPOXY BASE

SIZE	CODE IDENT NO.	
A	80230	2014647
SCALE-NONE	REV LTR H	SHEET 7 OF 29

MIL 2084 9-65

SEE NOTE

LIST OF MATERIALS

NUMBER	ITEM	QTY	PART NO.	DESCRIPTION
9	33	AR	1010661	EPOXY RESIN
9	34	AR	1010679	ADHESIVE, ACTIVATOR
	35	2	2014670-010	ADAPTER, CONNECTOR
9	36	15	1012534- 36	SLEEVING, INSULATION (HEAT SHRINKABLE)
	37	1	MS17182-2	TERMINAL LUG
	38	1	2014647-012	WIRE PER QQ-W-343, TYPE C, CLASS C, 22AWG, 16 FT TOT LG
	39	AR	1010989	TAPE, SHIELDING, EMI/RFI
	40	1	1006783- 93	SCREW, BUTTON HD
	41	1	MS35333-69	WASHER, LOCK
	42	AR	1006776- 44	INSULATION SLEEVING
	43	1	2014670- 11	ADAPTER, CONNECTOR

SIZE	CODE IDENT NO.	
A	80230	2014647
SCALE-NONE	REV LTR H	SHEET 8 OF 29

MIL 2084 9-65

LEAD IDENT	WIRE MATL ITEM	LEAD LG	CIRCUIT PT FROM (A) TO (B)	TERM.JKT AREA NO.	STRIP LG	SHLD STRIP LG	LEAD CUT LG	INS STRIP LG	TIN	NOTE ONE, FIG	ACCESSORY ITEMS	REMARKS
G	1	5										
G	1R		P21-51					.13	NO		18	
			P29-H5					.18	NO		21	BRANCH 1
G	1Y		P21-29					.13	NO		18	
			P29-K5					.18	NO		21	BRANCH 1
G	2	5										
G	2R		P21-53					.13	NO		18	
			P29-K3					.18	NO		21	BRANCH 1
G	2Y		P21-52					.13	NO		18	
			P29-K4					.18	NO		21	BRANCH 1
G	3	5										
G	3R		P21-28					.13	NO		18	
			P29-K7					.18	NO		21	BRANCH 1
G	3Y		P21-49					.13	NO		18	
			P29-K6					.18	NO		21	BRANCH 1
G	6	5										
G	6R		P21-3					.13	NO		18	
			P29-G11					.18	NO		21	BRANCH 1
G	6Y		P21-10					.13	NO		18	
			P29-H11					.18	NO		21	BRANCH 1

SIZE	CODE IDENT NO.	
A	80230	2014647
SCALE-NONE	REV LTR H	SHEET 9 OF 29

MIL 2084 9-65

LEAD IDENT	WIRE MATL ITEM	LEAD LG	CIRCUIT PT FROM (A) TO (B)	TERM. AREA NO.	JKT STRIP LG	SHLD STRIP LG	LEAD CUT LG	INS STRIP LG	TIN	NOTE ONE, FIG	ACCESSORY ITEMS	REMARKS
G 7	10				1.75	1.50				7	36	
					1.00	.75				6B	25	
G 7B	11		P29-F2					.18	NO		20	BRANCH 1
			SHLD G7					.20	NO			
G 7R			P21-39					.13	NO		18	
			P29-G2					.18	NO		21	BRANCH 1
G 7Y			P21-38					.13	NO		18	
			P29-H2					.18	NO		21	BRANCH 1
G 8	10				1.75	1.50				7	36	
					1.00	.75				6B	25	
G 8B	11		P29-F1					.18	NO		20	BRANCH 1
			SHLD G8					.20	NO			
G 8R			P21-37					.13	NO		18	
			P29-G1					.18	NO		21	BRANCH 1
G 8Y			P21-61					.13	NO		18	
			P29-H1					.18	NO		21	BRANCH 1
G 9			DELETED									
G 9B			DELETED									
G 9R			DELETED									
G 9Y			DELETED									

SIZE	CODE IDENT NO.	
A	80230	2014647
SCALE-NONE	REV LTR H	SHEET 10 OF 29

MIL 2084 9-65

LEAD IDENT	WIRE MATL ITEM	LEAD LG	CIRCUIT PT FROM (A) TO (B)	TERM. AREA NO.	JKT STRIP LG	SHLD STRIP LG	LEAD CUT LG	INS STRIP LG	TIN	NOTE ONE, FIG	ACCESSORY ITEMS	REMARKS
G 10			DELETED									
G 10B			DELETED									
G 10R			DELETED									
G 10Y			DELETED									
G 11	10				1.75	1.50				7	36	
					1.00	.75				6B	25	
G 11B	11		P29-C6					.18	NO		20	BRANCH 1
			SHLD G11					.20	NO			
G 11R			P21-17					.13	NO		18	
			P29-B6					.18	NO		21	BRANCH 1
G 11Y			P21-16					.13	NO		18	
			P29-A6					.18	NO		21	BRANCH 1
G 12	10				1.75	1.50				7	36	
					1.00	.75				6B	25	
G 12B	11		P29-D2					.18	NO		20	BRANCH 1
			SHLD G12					.20	NO			
G 12R			P21-59					.13	NO		18	
			P29-C2					.18	NO		21	BRANCH 1
G 12Y			P21-36					.13	NO		18	
			P29-B2					.18	NO		21	BRANCH 1

SIZE	CODE IDENT NO.	
A	80230	2014647
SCALE-NONE	REV LTR H	SHEET 11 OF 29

MIL 2084 9-65

LEAD IDENT	WIRE MATL ITEM	LEAD LG	CIRCUIT PT FROM (A) TO (B)	TERM. AREA NO.	JKT STRIP LG	SHLD STRIP LG	LEAD CUT LG	INS STRIP LG	TIN	NOTE ONE, FIG	ACCESSORY ITEMS	REMARKS
G 13	10				1.75	1.50				7	36	
					1.00	.75				6B	25	
G 13B	11		P29-D1					.18	NO		20	BRANCH 1
			SHLD G13					.20	NO			
G 13R			P21-57					.13	NO		18	
			P29-B1					.18	NO		21	BRANCH 1
G 13Y			P21-58					.13	NO		18	
			P29-C1					.18	NO		21	BRANCH 1
G 14	5											
G 14R			P21-42					.13	NO		18	
			P29-K9					.18	NO		21	BRANCH 1
G 14Y			P21-43					.13	NO		18	
			P29-H9					.18	NO		21	BRANCH 1
G 15	5											
G 15R			P21-24					.13	NO		18	
			P29-G9					.18	NO		21	BRANCH 1
G 15Y			P21-44					.13	NO		18	
			P29-G10					.18	NO		21	BRANCH 1
G 16	5											
G 16R			P21-46					.13	NO		18	
			P29-H10					.18	NO		21	BRANCH 1

SIZE	CODE IDENT NO.	
A	80230	2014647
SCALE-NONE	REV LTR H	SHEET 12 OF 29

MIL 2084 9-65

LEAD IDENT	WIRE MATL ITEM	LEAD LG	CIRCUIT PT FROM (A) TO (B)	TERM. AREA NO.	JKT STRIP LG	SHLD STRIP LG	LEAD CUT LG	INS STRIP LG	TIN	NOTE ONE, FIG	ACCESSORY ITEMS	REMARKS
G 16Y			P21-25					.13	NO		18	
			P29-K10					.18	NO		21	BRANCH 1
G 17	8											
G 17G			P21-26					.13	NO		18	
			P29-G12					.18	NO		21	BRANCH 2
G 17R			P21-12					.13	NO		18	
			P29-H12					.18	NO		21	BRANCH 2
G 17Y			P21-27					.13	NO		18	
			P29-H13					.18	NO		21	BRANCH 2
G 18	5											
G 18R			P20-7					.13	NO		18	
			P29-K23					.18	NO			BRANCH 2
G 18Y			P20-8					.13	NO		18	
			P29-K22					.18	NO		21	BRANCH 2
G 19	5											
G 19R			P20-23					.13	NO		18	
			P29-F25					.18	NO		21	BRANCH 2
G 19Y			P20-24					.13	NO		18	
			P29-F24					.18	NO		21	BRANCH 2
G 20	5											

SIZE	CODE IDENT NO.	
A	80230	2014647
SCALE-NONE	REV LTR H	SHEET 13 OF 29

MIL 2084 9-65

LEAD IDENT	WIRE MATL ITEM	LEAD LG	CIRCUIT PT FROM (A) TO (B)	TERM.JKT AREA NO.	STRIP LG	SHLD STRIP LG	LEAD CUT LG	INS STRIP LG	TIN	NOTE ONE, FIG	ACCESSORY ITEMS	REMARKS
G 20R			P20-3					.13	NO		18	
			P29-G24					.18	NO		21	BRANCH 2
G 20Y			P20-11					.13	NO		18	
			P29-G25					.18	NO		21	BRANCH 2
G 21	5											
G 21R			P20-25					.13	NO		18	
			P29-H25					.18	NO		21	BRANCH 2
G 21Y			P20-44					.13	NO		18	
			P29-H24					.18	NO		21	BRANCH 2
G 22	4											
G 22R			P20-5					.13	NO		18	
			P29-C23					.18	NO		20	BRANCH 2
G 22Y			P20-4					.13	NO		18	
			P29-C24					.18	NO		20	BRANCH 2
G 23	7											
G 23G			P20-30					.13	NO		18	
			P29-B25					.18	NO		20	BRANCH 2
G 23R			P20-15					.13	NO		18	
			P29-C25					.18	NO		20	BRANCH 2
G 23Y			P20-14					.13	NO		18	
			P29-B24					.18	NO		20	BRANCH 2

SIZE	CODE IDENT NO.	
A	80230	2014647
SCALE-NONE	REV LTR H	SHEET 14 OF 29

MIL 2084 9-65

LEAD IDENT	WIRE MATL ITEM	LEAD LG	CIRCUIT PT FROM (A) TO (B)	TERM.JKT AREA NO.	STRIP LG	SHLD STRIP LG	LEAD CUT LG	INS STRIP LG	TIN	NOTE ONE, FIG	ACCESSORY ITEMS	REMARKS
G 24	5											
G 24R			P20-46					.13	NO		18	
			P29-A23					.18	NO		21	BRANCH 2
G 24Y			P20-71					.13	NO		18	
			P29-B23					.18	NO		21	BRANCH 2
G 25	5											
G 25R			P20-73					.13	NO		18	
			P29-B22					.18	NO		21	BRANCH 2
G 25Y			P20-72					.13	NO		18	
			P29-A22					.18	NO		21	BRANCH 2
G 26	5											
G 26R			P20-28					.13	NO		18	
			P29-A21					.18	NO		21	BRANCH 2
G 26Y			P20-48					.13	NO		18	
			P29-B21					.18	NO		21	BRANCH 2
G 27	10				1.75	1.50				7	36	
					1.00	.75				6B	25	
G 27B	11		P29-C9					.18	NO		20	BRANCH 1
			SHLD G27					.20	NO			
G 27R			P20-80					.13	NO		18	
			P29-A9					.18	NO		21	BRANCH 1

SIZE	CODE IDENT NO.	
A	80230	2014647
SCALE-NONE	REV LTR H	SHEET 15 OF 29

MIL 2084 9-65

LEAD IDENT	WIRE MATL ITEM	LEAD LG	CIRCUIT PT FROM (A) TO (B)	TERM.JKT AREA NO.	STRIP LG	SHLD STRIP LG	LEAD CUT LG	INS STRIP LG	TIN	NOTE ONE, FIG	ACCESSORY ITEMS	REMARKS
G 27Y			P20-81					.13	NO		18	
			P29-B9					.18	NO		21	BRANCH 1
G 28	10				1.75	1.50				7	36	
					1.00	.75				6B	25	
G 28B	11		P29-C10					.18	NO		20	BRANCH 1
			SHLD G28					.20	NO			
G 28R			P20-57					.13	NO		18	
			P29-B10					.18	NO		21	BRANCH 1
G 28Y			P20-82					.13	NO		18	
			P29-A10					.18	NO		21	BRANCH 1
G 29	10				1.75	1.50				7	36	
					1.00	.75				6B	25	
G 29B	11		P29-D11					.18	NO		20	BRANCH 1
			SHLD G29					.20	NO			
G 29R			P20-85					.13	NO		18	
			P29-B11					.18	NO		21	BRANCH 1
G 29Y			P20-61					.13	NO		18	
			P29-C11					.18	NO		21	BRANCH 1
G 30	10				1.75	1.50				7	36	
					1.00	.75				6B	25	
G 30B	11		P29-D12					.18	NO		20	BRANCH 2
			SHLD G30					.20	NO			
G 30R			P20-83					.13	NO		18	
			P29-C12					.18	NO		21	BRANCH 2

SIZE	CODE IDENT NO.	
A	80230	2014647
SCALE-NONE	REV LTR H	SHEET 16 OF 29

MIL 2084 9-65

LEAD IDENT	WIRE MATL ITEM	LEAD LG	CIRCUIT PT FROM (A) TO (B)	TERM.JKT AREA NO.	STRIP LG	SHLD STRIP LG	LEAD CUT LG	INS STRIP LG	TIN	NOTE ONE, FIG	ACCESSORY ITEMS	REMARKS
G 30Y			P20-84					.13	NO		18	
			P29-B12					.18	NO		21	BRANCH 2
G 31	10				1.75	1.50				7	36	
					1.00	.75				6B	25	
G 31B	11		P29-D13					.18	NO		20	BRANCH 2
			SHLD G31					.20	NO			
G 31R			P20-59					.13	NO		18	
			P29-B13					.18	NO		21	BRANCH 2
G 31Y			P20-35					.13	NO		18	
			P29-C13					.18	NO		21	BRANCH 2
G 32	10				1.75	1.50				7	36	
					1.00	.75				6B	25	
G 32B	11		P29-D14					.18	NO		20	BRANCH 2
			SHLD G32					.20	NO			
G 32R			P20-34					.13	NO		18	
			P29-C14					.18	NO		21	BRANCH 2
G 32Y			P20-33					.13	NO		18	
			P29-B14					.18	NO		21	BRANCH 2
G 33	9											
G 33G			P20-22					.13	NO		18	
			P29-B15					.18	NO		21	BRANCH 2
G 33N			P20-40					.13	NO		18	
			P29-C15					.18	NO		21	BRANCH 2

SIZE	CODE IDENT NO.	
A	80230	2014647
SCALE-NONE	REV LTR H	SHEET 17 OF 29

MIL 2084 9-65

WIRING HARNESS G 2014647 H

LEAD IDENT	WIRE MATL ITEM	LEAD LG	CIRCUIT PT FROM (A) TO (B)	TERM. AREA NO.	JKT STRIP LG	SHLD STRIP LG	LEAD CUT LG	INS STRIP LG	TIN	NOTE ONE, FIG	ACCESSORY ITEMS	REMARKS
G 33R			P20-64					.13	NO		18	
			P29-C16					.18	NO		21	BRANCH 2
G 33Y			P20-39					.13	NO		18	
			P29-B16					.18	NO		21	BRANCH 2
G 35	6											
G 35G			P20-43					.13	NO		18	
			P29-C19					.18	NO		20	BRANCH 2
G 35R			P20-68					.13	NO		18	
			P29-C18					.18	NO		20	BRANCH 2
G 35Y			P20-69					.13	NO		18	
			P29-D18					.18	NO		20	BRANCH 2
G 36	3											
G 36R			P20-66					.13	NO		18	
			P29-A20					.18	NO		20	BRANCH 2
G 36Y			P20-42					.13	NO		18	
			P29-B20					.18	NO		20	BRANCH 2
G 37	5											
G 37R			P20-74					.13	NO		18	
			P29-C22					.18	NO		21	BRANCH 2
G 37Y			P20-75					.13	NO		18	
			P29-C21					.18	NO		21	BRANCH 2

SIZE	CODE IDENT NO.	
A	80230	2014647
SCALE-NONE	REV LTR H	SHEET 18 OF 29

MIL 2084 9-65

WIRING HARNESS G 2014647 H

LEAD IDENT	WIRE MATL ITEM	LEAD LG	CIRCUIT PT FROM (A) TO (B)	TERM. AREA NO.	JKT STRIP LG	SHLD STRIP LG	LEAD CUT LG	INS STRIP LG	TIN	NOTE ONE, FIG	ACCESSORY ITEMS	REMARKS
G 38	10				1.75	1.50				7	36	
					1.00	.75				6B	25	
G 38B	11		P29-G17					.18	NO		20	BRANCH 2
			SHLD G38					.20	NO			
G 38R			P20-79					.13	NO		18	
			P29-G15					.18	NO		21	BRANCH 2
G 38Y			P20-78					.13	NO		18	
			P29-G16					.18	NO		21	BRANCH 2
G 39	10				1.75	1.50				7	36	
					1.00	.75				6B	25	
G 39B	11		P29-H17					.18	NO		20	BRANCH 2
			SHLD G39					.20	NO			
G 39R			P20-54					.13	NO		18	
			P29-H16					.18	NO		21	BRANCH 2
G 39Y			P20-31					.13	NO		18	
			P29-H15					.18	NO		21	BRANCH 2
G 40	2		P22-1					.13	NO		17	A
			P32-1					.13	NO		18	
G 41	2		P22-5					.13	NO		17	A
			P32-5					.13	NO		18	
G 42	2		P22-6					.13	NO		17	A
			P32-6					.13	NO		18	
G 43	2		P22-16					.13	NO		17	A
			P32-16					.13	NO		18	

SIZE	CODE IDENT NO.	
A	80230	2014647
SCALE-NONE	REV LTR H	SHEET 19 OF 29

MIL 2084 9-65

WIRING HARNESS G 2014647 H

LEAD IDENT	WIRE MATL ITEM	LEAD LG	CIRCUIT PT FROM (A) TO (B)	TERM. AREA NO.	JKT STRIP LG	SHLD STRIP LG	LEAD CUT LG	INS STRIP LG	TIN	NOTE ONE, FIG	ACCESSORY ITEMS	REMARKS
G 44	2		P22-17					.13	NO		17	A
			P32-17					.13	NO		18	
G 45	2		P22-18					.13	NO		17	A
			P32-18					.13	NO		18	
G 46	2		P22-19					.13	NO		17	A
			P32-19					.13	NO		18	
G 47	2		P22-7					.13	NO		17	A
			P32-7					.13	NO		18	
G 48	2		P22-8					.13	NO		17	A
			P32-8					.13	NO		18	
G 49	2		P22-20					.13	NO		17	A
			P32-20					.13	NO		18	
G 50	2		P22-2					.13	NO		17	A
			P32-2					.13	NO		18	
G 51	2		P22-9					.13	NO		17	A
			P32-9					.13	NO		18	
G 52	2		P22-21					.13	NO		17	A
			P32-21					.13	NO		18	
G 53	2		P22-22					.13	NO		17	A
			P32-22					.13	NO		18	
G 54	2		P22-23					.13	NO		17	A
			P32-23					.13	NO		18	
G 55	2		P22-10					.13	NO		17	A
			P32-10					.13	NO		18	

SIZE	CODE IDENT NO.	
A	80230	2014647
SCALE-NONE	REV LTR H	SHEET 20 OF 29

MIL 2084 9-65

WIRING HARNESS G 2014647 H

LEAD IDENT	WIRE MATL ITEM	LEAD LG	CIRCUIT PT FROM (A) TO (B)	TERM. AREA NO.	JKT STRIP LG	SHLD STRIP LG	LEAD CUT LG	INS STRIP LG	TIN	NOTE ONE, FIG	ACCESSORY ITEMS	REMARKS
G 56	2		P22-24					.13	NO		17	A
			P32-24					.13	NO		18	
G 57	2		P22-3					.13	NO		17	A
			P32-3					.13	NO		18	
G 58	2		P22-11					.13	NO		17	A
			P32-11					.13	NO		18	
G 59	2		P22-79					.13	NO		17	A
			P32-79					.13	NO		18	
G 60	2		P22-13					.13	NO		17	A
			P32-13					.13	NO		18	
G 61	2		P22-33					.13	NO		17	A
			P32-33					.13	NO		18	
G 62	2		P22-4					.13	NO		17	A
			P32-4					.13	NO		18	
G 63	2		P22-12					.13	NO		17	A
			P32-12					.13	NO		18	
G 64	2		P22-74					.13	NO		17	A
			P32-74					.13	NO		18	
G 65	2		P22-14					.13	NO		17	A
			P32-14					.13	NO		18	
G 66	2		P22-29					.13	NO		17	A
			P32-29					.13	NO		18	
G 67	2		P22-30					.13	NO		17	A
			P32-30					.13	NO		18	

SIZE	CODE IDENT NO.	
A	80230	2014647
SCALE-NONE	REV LTR H	SHEET 21 OF 29

MIL 2084 9-65

LEAD IDENT	WIRE MATL ITEM	LEAD LG	CIRCUIT PT FROM (A) TO (B)	TERM.JKT AREA NO.	STRIP LG	SHLD STRIP LG	LEAD CUT LG	INS STRIP LG	TIN	NOTE ONE, FIG	ACCESSORY ITEMS	REMARKS
G 68	2		P22-15					.13	NO		17	A
			P32-15					.13	NO		18	
G 69	2		P22-28					.13	NO		17	A
			P32-28					.13	NO		18	
G 70	2		P22-50					.13	NO		17	A
			P32-50					.13	NO		18	
G 71	2		P22-51					.13	NO		17	A
			P32-51					.13	NO		18	
G 72	2		P22-76					.13	NO		17	A
			P32-76					.13	NO		18	
G 73	2		P22-75					.13	NO		17	A
			P32-75					.13	NO		18	
G 74	2		P22-49					.13	NO		17	A
			P32-49					.13	NO		18	
G 75	2		P22-55					.13	NO		17	A
			P32-55					.13	NO		18	
G 76	2		P22-56					.13	NO		17	A
			P32-56					.13	NO		18	
G 77	2		P22-43					.13	NO		17	A
			P32-43					.13	NO		18	
G 78	2		P22-44					.13	NO		17	A
			P32-44					.13	NO		18	
G 79	2		P22-54					.13	NO		17	A
			P32-54					.13	NO		18	

SIZE	CODE IDENT NO.	
A	80230	2014647
SCALE-NONE	REV LTR H	SHEET 22 OF 29

MIL 2084 9-65

LEAD IDENT	WIRE MATL ITEM	LEAD LG	CIRCUIT PT FROM (A) TO (B)	TERM.JKT AREA NO.	STRIP LG	SHLD STRIP LG	LEAD CUT LG	INS STRIP LG	TIN	NOTE ONE, FIG	ACCESSORY ITEMS	REMARKS
G 80	2		P22-59					.13	NO		17	A
			P32-59					.13	NO		18	
G 81	2		P22-34					.13	NO		17	A
			P32-34					.13	NO		18	
G 82	2		P22-83					.13	NO		17	A
			P32-83					.13	NO		18	
G 83	2		P22-57					.13	NO		17	A
			P32-57					.13	NO		18	
G 84	2		P22-58					.13	NO		17	A
			P32-58					.13	NO		18	
G 85	2		P22-39					.13	NO		17	A
			P32-39					.13	NO		18	
G 86	2		P22-35					.13	NO		17	A
			P32-35					.13	NO		18	
G 87	2		P22-64					.13	NO		17	A
			P32-64					.13	NO		18	
G 88	2		P22-65					.13	NO		17	A
			P32-65					.13	NO		18	
G 89	2		P22-40					.13	NO		17	A
			P32-40					.13	NO		18	
G 90	2		P22-32					.13	NO		17	A
			P32-32					.13	NO		18	
G 91	2		P22-31					.13	NO		17	A
			P32-31					.13	NO		18	

SIZE	CODE IDENT NO.	
A	80230	2014647
SCALE-NONE	REV LTR H	SHEET 23 OF 29

MIL 2084 9-65

LEAD IDENT	WIRE MATL ITEM	LEAD LG	CIRCUIT PT FROM (A) TO (B)	TERM.JKT AREA NO.	STRIP LG	SHLD STRIP LG	LEAD CUT LG	INS STRIP LG	TIN	NOTE ONE, FIG	ACCESSORY ITEMS	REMARKS
G 92	2		P22-78					.13	NO		17	A
			P32-78					.13	NO		18	
G 93	2		P22-42					.13	NO		17	A
			P32-42					.13	NO		18	
G 94	2		P22-41					.13	NO		17	A
			P32-41					.13	NO		18	
G 95	2		P22-38					.13	NO		17	A
			P32-38					.13	NO		18	
G 96	5											
G 96R			P20-26					.13	NO		18	
			P29-K18					.18	NO		21	BRANCH 2
G 96Y			P20-47					.13	NO		18	
			P29-H18					.18	NO		21	BRANCH 2
G 97	5											
G 97R			P20-13					.13	NO		18	
			P29-H19					.18	NO		21	BRANCH 2
G 97Y			P20-27					.13	NO		18	
			P29-K19					.18	NO		21	BRANCH 2
G 98	5											
G 98R			P20-51					.13	NO		18	
			P29-K20					.18	NO		21	BRANCH 2

SIZE	CODE IDENT NO.	
A	80230	2014647
SCALE-NONE	REV LTR H	SHEET 24 OF 29

MIL 2084 9-65

LEAD IDENT	WIRE MATL ITEM	LEAD LG	CIRCUIT PT FROM (A) TO (B)	TERM.JKT AREA NO.	STRIP LG	SHLD STRIP LG	LEAD CUT LG	INS STRIP LG	TIN	NOTE ONE, FIG	ACCESSORY ITEMS	REMARKS
G 98Y			P20-29					.13	NO		18	
			P29-H20					.18	NO		21	BRANCH 2
G 99	1		P20-62					.13	NO		18	
			P29-D19					.18	NO		20	BRANCH 2
G 100	2		P22-60					.13	NO		17	A
			P32-60					.13	NO		18	
G 101	2		P22-36					.13	NO		17	A
			P32-36					.13	NO		18	
G 102	2		P22-37					.13	NO		17	A
			P32-37					.13	NO		18	
G 103	2		P22-61					.13	NO		17	A
			P32-61					.13	NO		18	
G 104	2		P22-69					.13	NO		17	A
			P32-69					.13	NO		18	
G 105	2		P22-68					.13	NO		17	A
			P32-68					.13	NO		18	
G 106	2		P22-67					.13	NO		17	A
			P32-67					.13	NO		18	
G 107	2		P22-66					.13	NO		17	A
			P32-66					.13	NO		18	
G 112	5											
G 112R			P21-41					.13	NO		18	
			P29-A3					.18	NO		21	BRANCH 1

SIZE	CODE IDENT NO.	
A	80230	2014647
SCALE-NONE	REV LTR H	SHEET 25 OF 29

MIL 2084 9-65

LEAD IDENT	WIRE MATL ITEM	LEAD LG	CIRCUIT PT FROM (A) TO (B)	TERM. AREA NO.	JKT STRIP LG	SHLD STRIP LG	LEAD CUT LG	INS STRIP LG	TIN	NOTE ONE, FIG	ACCESSORY ITEMS	REMARKS
G 112Y			P21-22					.13	NO		18	
			P29-B3					.18	NO		21	BRANCH 1
G 113	2		P20-12					.13	NO		18	
			P29-K21					.18	NO		21	BRANCH 2
G 114	2		P20-77					.13	NO		18	
			P29-D21					.18	NO		21	BRANCH 2
G 115	3											
G 115R			J6-7					.13	NO		18	
			P29-A19					.18	NO		20	BRANCH 2
G 115Y			J6-4					.13	NO		18	
			P29-B19					.18	NO		20	BRANCH 2
G 116	3											
G 116R			J7-7					.13	NO		18	
			P29-A18					.18	NO		20	BRANCH 2
G 116Y			J7-4					.13	NO		18	
			P29-B18					.18	NO		20	BRANCH 2
G 117	2		P22-77					.13	NO		17	A
			P32-77					.13	NO		18	
G 118	2		P22-52					.13	NO		17	A
			P32-52					.13	NO		18	
G 119	2		P21-55					.13	NO		18	
			P29-A5					.18	NO		21	BRANCH 1

SIZE	CODE IDENT NO.	
A	80230	2014647
SCALE-NONE	REV LTR H	SHEET 26 OF 29

MIL 2084 9-65

LEAD IDENT	WIRE MATL ITEM	LEAD LG	CIRCUIT PT FROM (A) TO (B)	TERM. AREA NO.	JKT STRIP LG	SHLD STRIP LG	LEAD CUT LG	INS STRIP LG	TIN	NOTE ONE, FIG	ACCESSORY ITEMS	REMARKS
G 120	38		E35					.19	NO		37	A
			P32-81					.13	NO		18	
G 130	2		P20-67					.13	NO		18	
			P29-D25					.18	NO		21	
G 131	10				1.75	1.50				6B	25	
					1.75	1.50				6B	25	
G 131A	11		SHLD G131					.20	NO			
			P22-46					.13	NO		17	
G 131B	11		P32-46					.13	NO		18	
			SHLD G131					.20	NO			
G 131R			P22-45					.13	NO		17	
			P32-45					.13	NO		18	
G 131Y			P22-25					.13	NO		17	
			P32-25					.13	NO		18	
G 132	10				1.75	1.50				6B	25	
					1.75	1.50				6B	25	
G 132A	11		SHLD G132					.20	NO			
			P22-72					.13	NO		17	
G 132B	11		P32-72					.13	NO		18	
			SHLD G132					.20	NO			
G 132R			P22-70					.13	NO		17	
			P32-70					.13	NO		18	
G 132Y			P22-71					.13	NO		17	
			P32-71					.13	NO		18	

SIZE	CODE IDENT NO.	
A	80230	2014647
SCALE-NONE	REV LTR H	SHEET 27 OF 29

MIL 2084 9-65

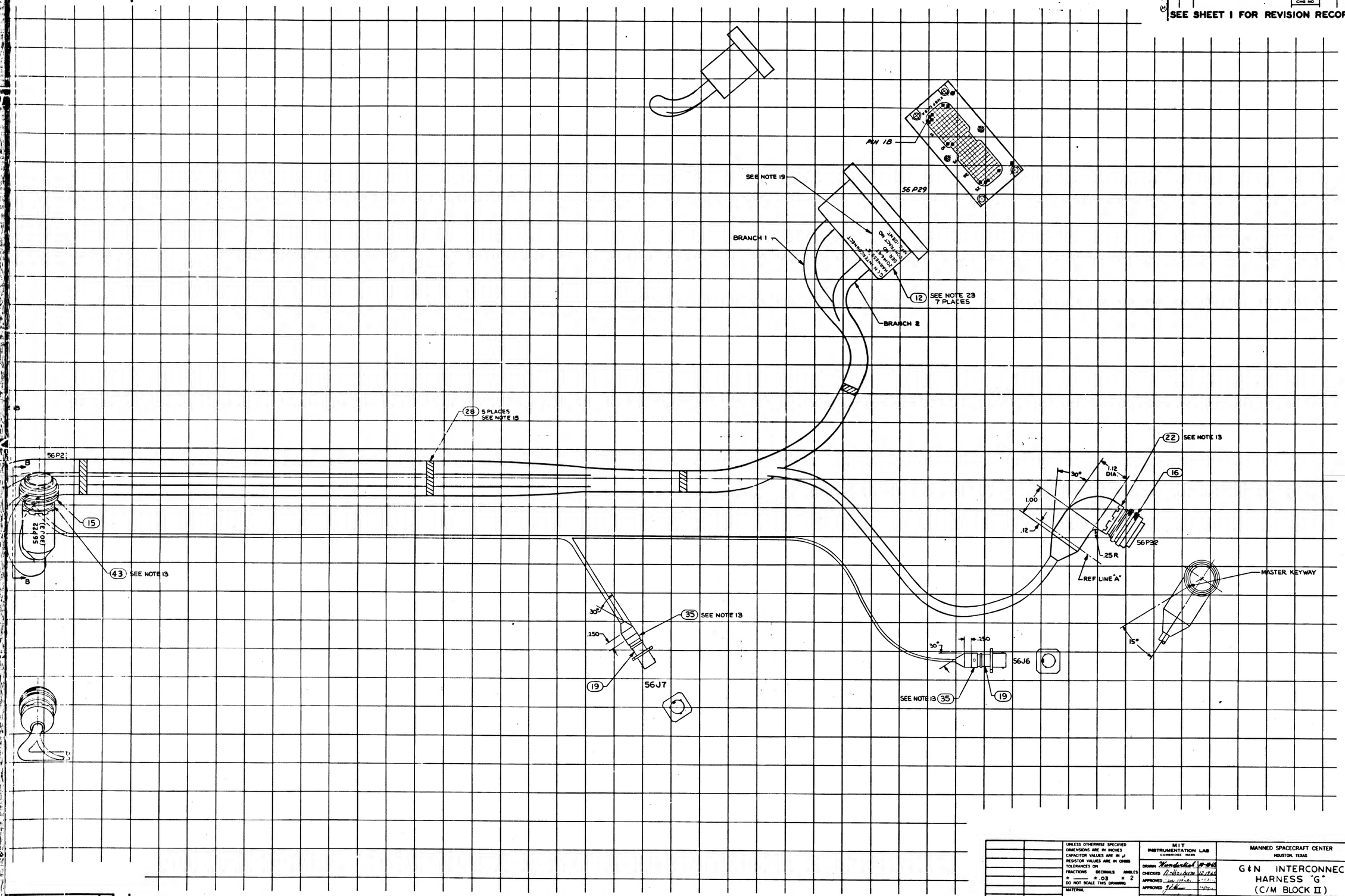
LEAD IDENT	WIRE MATL ITEM	LEAD LG	CIRCUIT PT FROM (A) TO (B)	TERM. AREA NO.	JKT STRIP LG	SHLD STRIP LG	LEAD CUT LG	INS STRIP LG	TIN	NOTE ONE, FIG	ACCESSORY ITEMS	REMARKS
G 133	10				1.75	1.50				6B	25	
					1.75	1.50				6B	25	
G 133A	11		SHLD G133					.20	NO			
			P22-27					.13	NO		17	
G 133B	11		P32-27					.13	NO		18	
			SHLD G133					.20	NO			
G 133R			P22-47					.13	NO		17	
			P32-47					.13	NO		18	
G 133Y			P22-26					.13	NO		17	
			P32-26					.13	NO		18	

SIZE	CODE IDENT NO.	
A	80230	2014647
SCALE-NONE	REV LTR H	SHEET 28 OF 29

MIL 2084 9-65

REVISIONS					
SYM	ZONE	DESCRIPTION	CHG NO	DATE	APPD

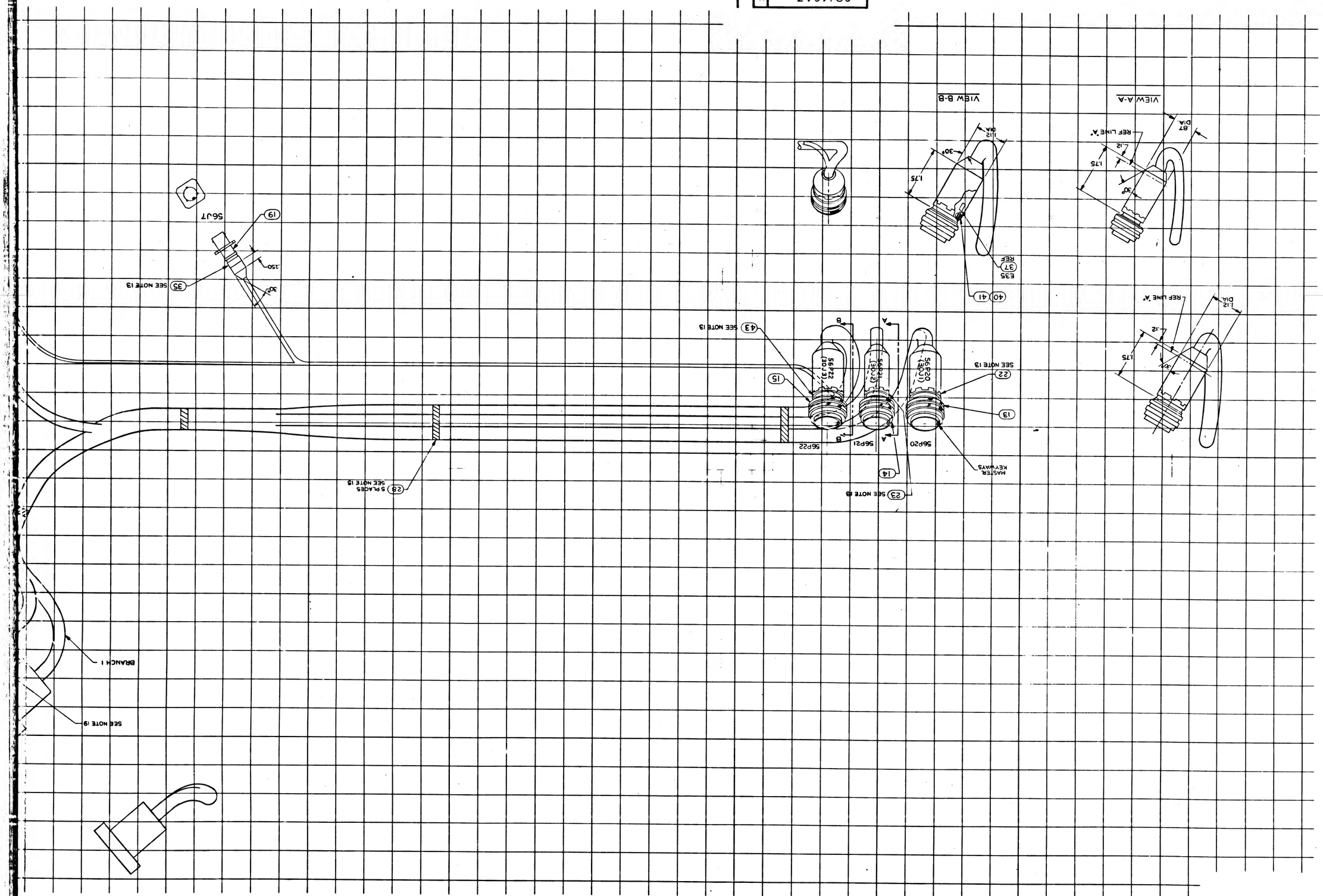
SEE SHEET 1 FOR REVISION RECORD



NEXT ASSY	USED ON	UNLESS OTHERWISE SPECIFIED DIMENSIONS ARE IN INCHES CAPACITOR VALUES ARE IN μf RESISTOR VALUES ARE IN OHMS TOLERANCES ON FRACTIONS ± DECIMALS ± .03 ANGLES ± 2 DO NOT SCALE THIS DRAWING	MIT INSTRUMENTATION LAB CAMBRIDGE MASS	MANNED SPACECRAFT CENTER HOUSTON, TEXAS
APPLICATION		MATERIAL	DRAWN / CHECKED / APPROVED / APPROVED	G&N INTERCONNECT HARNESS "G" (C/M BLOCK II)
			APPROVED MIT / APPROVED MSC / DATE	CODE IDENT NO 80230 / SIZE J / DRAWING NO 2014647
				SCALE FULL / SHEET 29 OF 29

2014647 H

2/2014647



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SEE NOTE 19

BRANCH 1

(23) SEE NOTE 13

(14)

MASTER KEY-WAYS

56P20

56P21

56P22

(13)

(22) SEE NOTE 13

56P20 (30-J1)

56P21 (30-J2)

56P22 (30-J3)

(15)

(43) SEE NOTE 13

(28) 5 PLACES SEE NOTE 15

30°

.12

1.75

1.12 DIA.

REF LINE "A"

(40) (41)

E35 (37) REF

1.75

30°

1.12 DIA.

.87 DIA.

VIEW A-A

VIEW B-B

(35) SEE NOTE 13

.250

(19)

56J7

2014647 H

1-42-01-41647

APPLICATION		REVISIONS			
NEXT ASSY	USED ON	SYM	DESCRIPTION	DATE	APPROVAL
2014567-011	2014567-011	E	REPLACES REV (D) WITH CHANGE PER MXC 207377	8 DEC 65	RLP
		F	ADDED CONFIGURATION AND CHANGED PER TDRR 34812		
		(M) G	Revised per TDRR 25306	2/7/66	
		(M) H	REVISED PER TDRR 27040	24 MAR 66	JB
		J	REVISED PER TDRR 28057	20 APR 66	TR

REPLACES REV D WITH CHANGE

REV	J	J	J	J	J	J	J	J	J	J														
SHEET	20	21	22	23	24	25	26	27	28	29	30													
REV STATUS	REV							J	J	J	J	J	J	J	J	J	J	J	J	J	J	J	J	J
OF SHEETS	SHEET							1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16	17	18	19

MIT
INSTRUMENTATION LAB
CAMBRIDGE, MASS

DWG. NO. CONTRACT

MANNED
SPACECRAFT CENTER
HOUSTON, TEXAS

DRAWN 26 MAY 65 DATE
CHECKED 28 MAY 65
APPROVAL 29 AUG 65
APPROVAL 6 Dec 1965

G&N INTERCONNECT HARNESS "G"

(C/M, BLOCK II)

NASA APPROVAL
MIT APPROVAL

CODE IDENT NO.	SIZE		REV
80230	A	2014647	J

CONTRACT NAS 9-497 | SCALE — | SHEET 1 OF 30

NOTE NUMBER	GENERAL NOTES DESCRIPTION
1	SHIELD TERMINATION FIGURES ARE PER ND1002071 FOR FIGURE 6B AND ND 1002032 FOR FIGURE 7.
2	INTERPRET DRAWING IN ACCORDANCE WITH STANDARDS PRESCRIBED BY MIL-D-70327.
3	INTERCONNECT LIST FOR THIS HARNESS IS 2014677.
4	PARTIAL CIRCUIT POINTS ARE SHOWN. PREFIX WITH UNIT NUMBER 56 FOR COMPLETE CIRCUIT POINT.
5	THE SUFFIX LETTER OF A CONDUCTOR IDENTIFICATION NUMBER IDENTIFIES A SHIELD LEAD, COLOR, OR MARKED LETTER. A - FROM END OF SHIELD B - TO END OF SHIELD G - GREEN K - BLACK L - BLUE N - BROWN R - RED W - WHITE Y - YELLOW
6	ASTERISK DENOTES LOWER CASE LETTER.
7	GRID MODULE ON PICTURE SHEET IS 1 INCH TRUE POSITION.
8	UNLESS OTHERWISE SPECIFIED FEATURE CENTERLINES ON PICTURE SHEET ARE LOCATED WITHIN + OR - .25. ENDS OF HOOKUP WIRES OR ACCESSORIES ARE LOCATED WITHIN .12.
9	VENDOR ITEM - SEE SOURCE CONTROL OR SPECIFICATION CONTROL DRAWING.
10	CRIMP CONTACTS PER ND1002232.

NOTE NUMBER	GENERAL NOTES DESCRIPTION
11	ALL UNUSED CONTACT CAVITIES SHALL BE FILLED WITH A CONTACT OR CONTACT AND SEALING PLUG AS FOLLOWS CONNECTOR 56P22, USE ITEM NUMBERS 17 AND 24. CONNECTOR 56P29, USE ITEM NUMBER 20. CONNECTORS 56P20,21, AND 32, USE ITEM NUMBERS 18 AND 24.
12	LACE HARNESS PER ND1002032 USING ITEM NUMBER 26.
13	A SMALL QUANTITY OF POTTING COMPOUND MUST BE PUT BETWEEN THE THREADED PORTION OF CONNECTOR AND SILICONE RUBBER GROMMET TO SEAL AND BOND RING TO CONNECTOR PRIOR TO POTTING.
14	ALL SHIELDED TERMINATIONS SHALL BE LOCATED BELOW REFERENCE LINE A. THERE SHALL BE NO EXPOSED CONDUCTORS AT THE SURFACE OF THE POTTING COMPOUND.
15	BEFORE LACING HARNESS, APPLY 2 TURNS OF TAPE, TO INDICATE CABLE CLAMP LOCATION.
16	WRAP TAPE AROUND HARNESS IN AREA SHOWN AS REQUIRED TO BUILD UP DIAMETER TO FIT SHELL HOLE.
17	MARK CONNECTOR WITH REFERENCE DESIGNATION AS SHOWN .12 HIGH, BLACK, HOT IMPRESSION STAMPING PER ND1002019, CENTRALIZE.
19	MARK CHARACTERS .12 HIGH, BLACK, PER ND1002019, SERIALIZE PER ND1002023.
20	CONTINUITY TEST PER CONDUCTOR CHART. RESISTANCE SHALL BE LESS THAN 1/2 OHM. TEST PER MIL-STD-202, METHOD 303.

NOTE NUMBER	GENERAL NOTES DESCRIPTION
21	INSULATION RESISTANCE SHALL BE GREATER THAN 100 MEGOHMS WITH 500 VDC APPLIED BETWEEN A. THE ASSEMBLY PINS AND STRUCTURE GROUND, EXCEPT THOSE PINS ELECTRICALLY CONNECTED TO STRUCTURE GROUND. B. EACH PIN AND ALL OTHER PINS NOT ELECTRICALLY CONNECTED, INCLUDING ALL SPARE PINS. TEST PER MIL-STD-202, METHOD 302, EXCEPT ELECTRIFICATION TIME NOT APPLICABLE.
22	PRESEAL BACK OF CONNECTOR P29 PRIOR TO ENCAPSULATION PER ND1002187 TYPE III USING ITEMS 31,32,33, AND 34.
23	ENCAPSULATE BACK OF CONNECTORS PER ND1002236 USING ITEMS 29 AND 30.
24	CONDUCTORS SHALL ENTER CONNECTOR 56P29 THROUGH THE APPROPRIATE BRANCH SPECIFIED IN THE REMARKS COLUMN.
25	GROUP SHIELDING - THREAD ONE CONTINUOUS LENGTH OF GROUND WIRE, ITEM 38, THROUGH CENTER OF EMI/RFI SHIELDING TAPE, ITEM 39. ALLOW 6 INCHES OF GROUND WIRE TO EXTEND BEYOND ENDS OF SHIELDING TAPE. WRAP CABLE WITH ONE CONTINUOUS LENGTH OF PREPARED SHIELDING. SUCCESSIVE TURNS SHALL OVERLAP BY APPROXIMATELY 1/2 THE WIDTH OF THE TAPE, WITH A MINIMUM OF RIDGES AND FOLDS.
26	COMPLETELY COVER SHIELD WITH ONE CONTINUOUS WRAP OF INSULATION TAPE, ITEM 27. SUCCESSIVE TURNS SHALL OVERLAP BY APPROXIMATELY 1/2 THE WIDTH OF THE TAPE WITH A MINIMUM OF RIDGES AND FOLDS.
27	ASSEMBLE INSULATION TUBING, ITEM 42, OVER GROUND WIRE AS REQUIRED TO REACH TERMINATION. ASSEMBLE SHRINK SLEEVING AS SHOWN.

NOTE NUMBER	GENERAL NOTES DESCRIPTION
29	PERFORM WORKMANSHIP VIBRATION A. SINUSOIDAL SWEEP AT 3.5 G RMS. LIMITED TO 0.3 INCH PEAK TO PEAK DISPLACEMENT, FROM 10 TO 2000 CPS AT A RATE OF 4 OCTAVES PER MINUTE. B. VIBRATION ALONG THE X AXIS OF THE SPACE CRAFT. C. MONITOR FOR DISCONTINUITIES OF 10 MICRO SECONDS OR GREATER DURING VIBRATION. D. COMPLETE CONTINUITY AND INSULATION RESISTANCE TESTING MUST BE ACCOMPLISHED AFTER VIBRATION.

LEAD TOLERANCE CHART

	LEAD LG	JKT STRIP LG	SHIELD STRIP LG	LEAD CUT LG	INS STRIP LG
UNDER 3 INCHES	+ .12-.00	+.06-.06	+.06-.06	+.06-.06	+.06-.00
3 INCH TO 3 FT	+ .50-.00	+.25-.25	+.25-.25	+.25-.25	
3 FT TO 10 FT	+1.00-.00				
10 FT AND OVER	+2.00-.00				

SEE NOTE

LIST OF MATERIALS

NUMBER	ITEM	QTY	PART NO.	DESCRIPTION
	1	1	2014647- 1	WIRE PER 1010789-006, 22 AWG, YEL, 5 FT TOT LG
	2	1	2014647- 2	WIRE PER 1010789-016, 26 AWG, YEL, 265 FT TOT LG
	3	1	2014647- 3	WIRE PER 1010789-008, 22 AWG, YEL, RED, 15 FT TOT LG
	4	1	2014647- 4	WIRE PER 1010789-003, 24 AWG, YEL, RED, 5 FT TOT LG
	5	1	2014647- 5	WIRE PER 1010789-017, 26 AWG, YEL, RED, 75 FT TOT LG
	6	1	2014647- 6	WIRE PER 1010789-009, 22 AWG, YEL, RED, GRN, 5 FT TOT LG
	7	1	2014647- 7	WIRE PER 1010789-004, 24 AWG, YEL, RED, GRN, 5 FT TOT LG
	8	1	2014647- 8	WIRE PER 1010789-018, 26 AWG, YEL, RED, GRN, 5 FT TOT LG
	9	1	2014647- 9	WIRE PER 1010789-019, 26 AWG, YEL, RED, GRN, BRN, 5 FT TOT LG
	10	1	2014647- 10	WIRE PER 1010789-015, 26 AWG, YEL, RED, YEL JKT, 72 FT TOT LG
	11	1	2014647- 11	WIRE PER 1010789-002, 24 AWG, BLK, 15 FT TOT LG
	12	1	2014747	CONNECTOR, PLUG, ELECTRICAL (56P29)
9	13	1	1010929-002	CONNECTOR, PLUG, ELECTRICAL (56P20)
9	14	1	1010929-008	CONNECTOR, PLUG, ELECTRICAL (56P21)

SIZE	CODE IDENT NO.	
A	80230	2014647
SCALE-NONE	REV LTR J	SHEET 6 OF 30

MIL 2084 9-65

SEE NOTE

LIST OF MATERIALS

NUMBER	ITEM	QTY	PART NO.	DESCRIPTION
9	15	1	1010929-101	CONNECTOR, PLUG, ELECTRICAL (56P22)
9	16	1	1010929-001	CONNECTOR, PLUG, ELECTRICAL (56P32)
9	17	REF	1010770- 1	CONTACT, PIN, SUPPLIED WITH CONNECTOR 1010929
9	18	REF	1010770- 2	CONTACT, SOCKET, SUPPLIED WITH CONNECTORS 1010929 AND 1010930
9	19	2	1010930-017	CONNECTOR, RECEPTACLE, ELECTRICAL (56J6, 56J7)
9	20	104	1010955- 1	CONTACT, MALE
9	21	80	1010955- 2	CONTACT, MALE
	22	2	2014670- 4	ADAPTER, CONNECTOR
	23	1	2014670- 5	ADAPTER, CONNECTOR
9	24	110	1010958- 1	PLUG, PROTECTIVE SEALING
9	25	19	1010402- 2	SLEEVE, SOLDER
9	26	AR	1012507- 4	TAPE, LACING
	27	AR	MIL-T-23594	TAPE, TEFLON, TYPE II, 1 INCH WIDE
	28	AR	MIL-T-23594	TAPE, TEFLON, TYPE II, 1/4 INCH WIDE
9	29	AR	1012503	COMPOUND, POTTING, POLYURETHANE
9	30	AR	1012504	PRIMER, METAL PARTS
9	31	AR	1006277	SILICA, PULVERIZED, PYROGENIC
9	32	AR	1008822	COLORANT, EPOXY BASE

SIZE	CODE IDENT NO.	
A	80230	2014647
SCALE-NONE	REV LTR J	SHEET 7 OF 30

MIL 2084 9-65

SEE NOTE

LIST OF MATERIALS

NUMBER	ITEM	QTY	PART NO.	DESCRIPTION
9	33	AR	1010661	EPOXY RESIN
9	34	AR	1010679	ADHESIVE, ACTIVATOR
	35	2	2014670-010	ADAPTER, CONNECTOR
9	36	15	1012534- 36	SLEEVING, INSULATION (HEAT SHRINKABLE)
	37	1	MS17182-1	TERMINAL LUG
	38	1	2014647-012	WIRE PER QQ-W-343, TYPE C, CLASS C, 22AWG, 16 FT TOT LG
	39	AR	1010989	TAPE, SHIELDING, EMI/RFI
	40	1	1006783- 93	SCREW, BUTTON HD
	41	1	MS35333-69	WASHER, LOCK
	42	AR	1006776- 44	INSULATION SLEEVING
	43	1	2014670- 11	ADAPTER, CONNECTOR
	44	1	2014647-013	WIRE PER 1010707-1, RED JKT, 29AWG, RED, WHT, BLU, 15 FT TOTAL LG.
9	45	6	1010862	BUSHING, SLEEVE
9	46	6	1010763- 2	SOLDER, SLEEVE

SIZE	CODE IDENT NO.	
A	80230	2014647
SCALE-NONE	REV LTR J	SHEET 8 OF 30

MIL 2084 9-65

LEAD IDENT	WIRE MATL ITEM	LEAD LG	CIRCUIT PT FROM (A) TO (B)	TERM.JKT AREA NO.	STRIP LG	SHLD STRIP LG	LEAD CUT LG	INS STRIP LG	TIN	NOTE ONE, FIG	ACCESSORY ITEMS	REMARKS
G 1	5											
G 1R			P21-51					.13	NO		18	
			P29-H5					.18	NO		21	BRANCH 1
G 1Y			P21-29					.13	NO		18	
			P29-K5					.18	NO		21	BRANCH 1
G 2	5											
G 2R			P21-53					.13	NO		18	
			P29-K3					.18	NO		21	BRANCH 1
G 2Y			P21-52					.13	NO		18	
			P29-K4					.18	NO		21	BRANCH 1
G 3	5											
G 3R			P21-28					.13	NO		18	
			P29-K7					.18	NO		21	BRANCH 1
G 3Y			P21-49					.13	NO		18	
			P29-K6					.18	NO		21	BRANCH 1
G 6	5											
G 6R			P21-3					.13	NO		18	
			P29-G11					.18	NO		21	BRANCH 1
G 6Y			P21-10					.13	NO		18	
			P29-H11					.18	NO		21	BRANCH 1

SIZE	CODE IDENT NO.	
A	80230	2014647
SCALE-NONE	REV LTR J	SHEET 9 OF 30

MIL 2084 9-65

LEAD IDENT	WIRE MATL ITEM	LEAD LG	CIRCUIT PT FROM (A) TO (B)	TERM. AREA NO.	JKT STRIP LG	SHLD STRIP LG	LEAD CUT LG	INS STRIP LG	TIN	NOTE ONE, FIG	ACCESSORY ITEMS	REMARKS
G	7	10			1.75 1.00	1.50 .75				7 68	36 25	
G	7B	11	P29-F2 SHLD G7					.18 .20	NO NO		20	BRANCH 1
G	7R		P21-39 P29-G2					.13 .18	NO NO		18 21	BRANCH 1
G	7Y		P21-38 P29-H2					.13 .18	NO NO		18 21	BRANCH 1
G	8	10			1.75 1.00	1.50 .75				7 68	36 25	
G	8B	11	P29-F1 SHLD G8					.18 .20	NO NO		20	BRANCH 1
G	8R		P21-37 P29-G1					.13 .18	NO NO		18 21	BRANCH 1
G	8Y		P21-61 P29-H1					.13 .18	NO NO		18 21	BRANCH 1
G	9		DELETED									
G	9B		DELETED									
G	9R		DELETED									
G	9Y		DELETED									

SIZE	CODE IDENT NO.		
A	80230	2014647	
SCALE-NONE	REV LTR J	SHEET 10 OF 30	

MIL 2084 9-65

LEAD IDENT	WIRE MATL ITEM	LEAD LG	CIRCUIT PT FROM (A) TO (B)	TERM. AREA NO.	JKT STRIP LG	SHLD STRIP LG	LEAD CUT LG	INS STRIP LG	TIN	NOTE ONE, FIG	ACCESSORY ITEMS	REMARKS
G	10		DELETED									
G	10B		DELETED									
G	10R		DELETED									
G	10Y		DELETED									
G	11	10			1.75 1.00	1.50 .75				7 68	36 25	
G	11B	11	P29-C6 SHLD G11					.18 .20	NO NO		20	BRANCH 1
G	11R		P21-17 P29-B6					.13 .18	NO NO		18 21	BRANCH 1
G	11Y		P21-16 P29-A6					.13 .18	NO NO		18 21	BRANCH 1
G	12	10			1.75 1.00	1.50 .75				7 68	36 25	
G	12B	11	P29-D2 SHLD G12					.18 .20	NO NO		20	BRANCH 1
G	12R		P21-59 P29-C2					.13 .18	NO NO		18 21	BRANCH 1
G	12Y		P21-36 P29-B2					.13 .18	NO NO		18 21	BRANCH 1

SIZE	CODE IDENT NO.		
A	80230	2014647	
SCALE-NONE	REV LTR J	SHEET 11 OF 30	

MIL 2084 9-65

LEAD IDENT	WIRE MATL ITEM	LEAD LG	CIRCUIT PT FROM (A) TO (B)	TERM. AREA NO.	JKT STRIP LG	SHLD STRIP LG	LEAD CUT LG	INS STRIP LG	TIN	NOTE ONE, FIG	ACCESSORY ITEMS	REMARKS
G	13	10			1.75 1.00	1.50 .75				7 68	36 25	
G	13B	11	P29-D1 SHLD G13					.18 .20	NO NO		20	BRANCH 1
G	13R		P21-57 P29-B1					.13 .18	NO NO		18 21	BRANCH 1
G	13Y		P21-58 P29-C1					.13 .18	NO NO		18 21	BRANCH 1
G	14	5										
G	14R		P21-42 P29-K9					.13 .18	NO NO		18 21	BRANCH 1
G	14Y		P21-43 P29-H9					.13 .18	NO NO		18 21	BRANCH 1
G	15	5										
G	15R		P21-24 P29-G9					.13 .18	NO NO		18 21	BRANCH 1
G	15Y		P21-44 P29-G10					.13 .18	NO NO		18 21	BRANCH 1
G	16	5										
G	16R		P21-46 P29-H10					.13 .18	NO NO		18 21	BRANCH 1

SIZE	CODE IDENT NO.		
A	80230	2014647	
SCALE-NONE	REV LTR J	SHEET 12 OF 30	

MIL 2084 9-65

LEAD IDENT	WIRE MATL ITEM	LEAD LG	CIRCUIT PT FROM (A) TO (B)	TERM. AREA NO.	JKT STRIP LG	SHLD STRIP LG	LEAD CUT LG	INS STRIP LG	TIN	NOTE ONE, FIG	ACCESSORY ITEMS	REMARKS
G	14Y		P21-25 P29-K10					.13 .18	NO NO		18 21	BRANCH 1
G	17	8										
G	17G		P21-26 P29-G12					.13 .18	NO NO		18 21	BRANCH 2
G	17R		P21-12 P29-H12					.13 .18	NO NO		18 21	BRANCH 2
G	17Y		P21-27 P29-H13					.13 .18	NO NO		18 21	BRANCH 2
G	18	5										
G	18R		P20-7 P29-K23					.13 .18	NO NO		18	BRANCH 2
G	18Y		P20-8 P29-K22					.13 .18	NO NO		18 21	BRANCH 2
G	19		DELETED									
G	19R		DELETED									
G	19Y		DELETED									
G	20		DELETED									

SIZE	CODE IDENT NO.		
A	80230	2014647	
SCALE-NONE	REV LTR J	SHEET 13 OF 30	

MIL 2084 9-65

LEAD IDENT	WIRE MATL ITEM	LEAD LG	CIRCUIT PT FROM (A) TO (B)	TERM.AREA NO.	JKT STRIP LG	SHLD STRIP LG	LEAD CUT LG	INS STRIP LG	TIN	NOTE ONE, FIG	ACCESSORY ITEMS	REMARKS
G 20R			DELETED									
G 20Y			DELETED									
G 21			DELETED									
G 21R			DELETED									
G 21Y			DELETED									
G 22	4											
G 22R			P20-5					.13	NO		18	
			P29-C23					.18	NO		20	BRANCH 2
G 22Y			P20-4					.13	NO		18	
			P29-C24					.18	NO		20	BRANCH 2
G 23	7											
G 23G			P20-30					.13	NO		18	
			P29-B25					.18	NO		20	BRANCH 2
G 23R			P20-15					.13	NO		18	
			P29-C25					.18	NO		20	BRANCH 2
G 23Y			P20-14					.13	NO		18	
			P29-B24					.18	NO		20	BRANCH 2

SIZE	CODE IDENT NO.	
A	80230	2014647
SCALE-NONE	REV LTR J	SHEET 14 OF 30

MIL 2084 9-65

LEAD IDENT	WIRE MATL ITEM	LEAD LG	CIRCUIT PT FROM (A) TO (B)	TERM.AREA NO.	JKT STRIP LG	SHLD STRIP LG	LEAD CUT LG	INS STRIP LG	TIN	NOTE ONE, FIG	ACCESSORY ITEMS	REMARKS
G 24	5											
G 24R			P20-46					.13	NO		18	
			P29-A23					.18	NO		21	BRANCH 2
G 24Y			P20-71					.13	NO		18	
			P29-B23					.18	NO		21	BRANCH 2
G 25	5											
G 25R			P20-73					.13	NO		18	
			P29-B22					.18	NO		21	BRANCH 2
G 25Y			P20-72					.13	NO		18	
			P29-A22					.18	NO		21	BRANCH 2
G 26	5											
G 26R			P20-28					.13	NO		18	
			P29-A21					.18	NO		21	BRANCH 2
G 26Y			P20-48					.13	NO		18	
			P29-B21					.18	NO		21	BRANCH 2
G 27	10				1.75	1.50				7	36	
					1.00	.75				6B	25	
G 27B	11		P29-C9					.18	NO		20	BRANCH 1
			SHLD G27					.20	NO			
G 27R			P20-80					.13	NO		18	
			P29-A9					.18	NO		21	BRANCH 1

SIZE	CODE IDENT NO.	
A	80230	2014647
SCALE-NONE	REV LTR J	SHEET 15 OF 30

MIL 2084 9-65

LEAD IDENT	WIRE MATL ITEM	LEAD LG	CIRCUIT PT FROM (A) TO (B)	TERM.AREA NO.	JKT STRIP LG	SHLD STRIP LG	LEAD CUT LG	INS STRIP LG	TIN	NOTE ONE, FIG	ACCESSORY ITEMS	REMARKS
G 27Y			P20-81					.13	NO		18	
			P29-B9					.18	NO		21	BRANCH 1
G 28	10				1.75	1.50				7	36	
					1.00	.75				6B	25	
G 28B	11		P29-C10					.18	NO		20	BRANCH 1
			SHLD G28					.20	NO			
G 28R			P20-57					.13	NO		18	
			P29-B10					.18	NO		21	BRANCH 1
G 28Y			P20-82					.13	NO		18	
			P29-A10					.18	NO		21	BRANCH 1
G 29	10				1.75	1.50				7	36	
					1.00	.75				6B	25	
G 29B	11		P29-D11					.18	NO		20	BRANCH 1
			SHLD G29					.20	NO			
G 29R			P20-85					.13	NO		18	
			P29-B11					.18	NO		21	BRANCH 1
G 29Y			P20-61					.13	NO		18	
			P29-C11					.18	NO		21	BRANCH 1
G 30	10				1.75	1.50				7	36	
					1.00	.75				6B	25	
G 30B	11		P29-D12					.18	NO		20	BRANCH 2
			SHLD G30					.20	NO			
G 30R			P20-83					.13	NO		18	
			P29-C12					.18	NO		21	BRANCH 2

SIZE	CODE IDENT NO.	
A	80230	2014647
SCALE-NONE	REV LTR J	SHEET 16 OF 30

MIL 2084 9-65

LEAD IDENT	WIRE MATL ITEM	LEAD LG	CIRCUIT PT FROM (A) TO (B)	TERM.AREA NO.	JKT STRIP LG	SHLD STRIP LG	LEAD CUT LG	INS STRIP LG	TIN	NOTE ONE, FIG	ACCESSORY ITEMS	REMARKS
G 30Y			P20-84					.13	NO		18	
			P29-B12					.18	NO		21	BRANCH 2
G 31	10				1.75	1.50				7	36	
					1.00	.75				6B	25	
G 31B	11		P29-D13					.18	NO		20	BRANCH 2
			SHLD G31					.20	NO			
G 31R			P20-59					.13	NO		18	
			P29-B13					.18	NO		21	BRANCH 2
G 31Y			P20-35					.13	NO		18	
			P29-C13					.18	NO		21	BRANCH 2
G 32	10				1.75	1.50				7	36	
					1.00	.75				6B	25	
G 32B	11		P29-D14					.18	NO		20	BRANCH 2
			SHLD G32					.20	NO			
G 32R			P20-34					.13	NO		18	
			P29-C14					.18	NO		21	BRANCH 2
G 32Y			P20-33					.13	NO		18	
			P29-B14					.18	NO		21	BRANCH 2
G 33	9											
G 33G			P20-22					.13	NO		18	
			P29-B15					.18	NO		21	BRANCH 2
G 33N			P20-40					.13	NO		18	
			P29-C15					.18	NO		21	BRANCH 2

SIZE	CODE IDENT NO.	
A	80230	2014647
SCALE-NONE	REV LTR J	SHEET 17 OF 30

MIL 2084 9-65

LEAD IDENT	WIRE MATL ITEM	LEAD LG	CIRCUIT PT FROM (A) TO (B)	TERM.JKT AREA NO.	STRIP LG	SHLD STRIP LG	LEAD CUT LG	INS STRIP LG	TIN	NOTE ONE, FIG	ACCESSORY ITEMS	REMARKS
G 33R			P20-64					.13	NO		18	
			P29-C16					.18	NO		21	BRANCH 2
G 33Y			P20-39					.13	NO		18	
			P29-B16					.18	NO		21	BRANCH 2
G 35	6											
G 35G			P20-43					.13	NO		18	
			P29-C19					.18	NO		20	BRANCH 2
G 35R			P20-68					.13	NO		18	
			P29-C18					.18	NO		20	BRANCH 2
G 35Y			P20-69					.13	NO		18	
			P29-D18					.18	NO		20	BRANCH 2
G 36	3											
G 36R			P20-66					.13	NO		18	
			P29-A20					.18	NO		20	BRANCH 2
G 36Y			P20-42					.13	NO		18	
			P29-B20					.18	NO		20	BRANCH 2
G 37	5											
G 37R			P20-74					.13	NO		18	
			P29-C22					.18	NO		21	BRANCH 2
G 37Y			P20-75					.13	NO		18	
			P29-C21					.18	NO		21	BRANCH 2

SIZE	CODE IDENT NO.	
A	80230	2014647
SCALE-NONE	REV LTR J	SHEET 18 OF 30

MIL 2084 9-65

LEAD IDENT	WIRE MATL ITEM	LEAD LG	CIRCUIT PT FROM (A) TO (B)	TERM.JKT AREA NO.	STRIP LG	SHLD STRIP LG	LEAD CUT LG	INS STRIP LG	TIN	NOTE UNF, FIG	ACCESSORY ITEMS	REMARKS
G 38	10				1.75	1.50				7	36	
					1.00	.75				6B	25	
G 38B	11		P29-G17					.18	NO		20	BRANCH 2
			SHLD G38					.20	NO			
G 38R			P20-79					.13	NO		18	
			P29-G15					.18	NO		21	BRANCH 2
G 38Y			P20-78					.13	NO		18	
			P29-G16					.18	NO		21	BRANCH 2
G 39	10				1.75	1.50				7	36	
					1.00	.75				6B	25	
G 39B	11		P29-H17					.18	NO		20	BRANCH 2
			SHLD G39					.20	NO			
G 39R			P20-54					.13	NO		18	
			P29-H16					.18	NO		21	BRANCH 2
G 39Y			P20-31					.13	NO		18	
			P29-H15					.18	NO		21	BRANCH 2
G 40	2		P22-1					.13	NO		17	A
			P32-1					.13	NO		18	
G 41	2		P22-5					.13	NO		17	A
			P32-5					.13	NO		18	
G 42	2		P22-6					.13	NO		17	A
			P32-6					.13	NO		18	
G 43	2		P22-16					.13	NO		17	A
			P32-16					.13	NO		18	

SIZE	CODE IDENT NO.	
A	80230	2014647
SCALE-NONE	REV LTR J	SHEET 19 OF 30

MIL 2084 9-65

LEAD IDENT	WIRE MATL ITEM	LEAD LG	CIRCUIT PT FROM (A) TO (B)	TERM.JKT AREA NO.	STRIP LG	SHLD STRIP LG	LEAD CUT LG	INS STRIP LG	TIN	NOTE ONE, FIG	ACCESSORY ITEMS	REMARKS
G 44	2		P22-17					.13	NO		17	A
			P32-17					.13	NO		18	
G 45	2		P22-18					.13	NO		17	A
			P32-18					.13	NO		18	
G 46	2		P22-19					.13	NO		17	A
			P32-19					.13	NO		18	
G 47	2		P22-7					.13	NO		17	A
			P32-7					.13	NO		18	
G 48	2		P22-8					.13	NO		17	A
			P32-8					.13	NO		18	
G 49	2		P22-20					.13	NO		17	A
			P32-20					.13	NO		18	
G 50	2		P22-2					.13	NO		17	A
			P32-2					.13	NO		18	
G 51	2		P22-9					.13	NO		17	A
			P32-9					.13	NO		18	
G 52	2		P22-21					.13	NO		17	A
			P32-21					.13	NO		18	
G 53	2		P22-22					.13	NO		17	A
			P32-22					.13	NO		18	
G 54	2		P22-23					.13	NO		17	A
			P32-23					.13	NO		18	
G 55	2		P22-10					.13	NO		17	A
			P32-10					.13	NO		18	

SIZE	CODE IDENT NO.	
A	80230	2014647
SCALE-NONE	REV LTR J	SHEET 20 OF 30

MIL 2084 9-65

LEAD IDENT	WIRE MATL ITEM	LEAD LG	CIRCUIT PT FROM (A) TO (B)	TERM.JKT AREA NO.	STRIP LG	SHLD STRIP LG	LEAD CUT LG	INS STRIP LG	TIN	NOTE ONE, FIG	ACCESSORY ITEMS	REMARKS
G 56	2		P22-24					.13	NO		17	A
			P32-24					.13	NO		18	
G 57	2		P22-3					.13	NO		17	A
			P32-3					.13	NO		18	
G 58	2		P22-11					.13	NO		17	A
			P32-11					.13	NO		18	
G 59	2		P22-79					.13	NO		17	A
			P32-79					.13	NO		18	
G 60	2		P22-13					.13	NO		17	A
			P32-13					.13	NO		18	
G 61	2		P22-33					.13	NO		17	A
			P32-33					.13	NO		18	
G 62	2		P22-4					.13	NO		17	A
			P32-4					.13	NO		18	
G 63	2		P22-12					.13	NO		17	A
			P32-12					.13	NO		18	
G 64	2		P22-74					.13	NO		17	A
			P32-74					.13	NO		18	
G 65	2		P22-14					.13	NO		17	A
			P32-14					.13	NO		18	
G 66	2		P22-29					.13	NO		17	A
			P32-29					.13	NO		18	
G 67	2		P22-30					.13	NO		17	A
			P32-30					.13	NO		18	

SIZE	CODE IDENT NO.	
A	80230	2014647
SCALE-NONE	REV LTR J	SHEET 21 OF 30

MIL 2084 9-65

LEAD IDENT	WIRE MATL ITEM	LEAD LG	CIRCUIT PT FROM (A) TO (B)	TERM.JKT AREA NO.	STRIP LG	SHLD STRIP LG	LEAD CUT LG	INS STRIP LG	TIN	NOTE ONE, FIG	ACCESSORY ITEMS	REMARKS
G 68	2		P22-15					.13	NO		17	A
			P32-15					.13	NO		18	
G 69	2		P22-28					.13	NO		17	A
			P32-28					.13	NO		18	
G 70	2		P22-50					.13	NO		17	A
			P32-50					.13	NO		18	
G 71	2		P22-51					.13	NO		17	A
			P32-51					.13	NO		18	
G 72	2		P22-76					.13	NO		17	A
			P32-76					.13	NO		18	
G 73	2		P22-75					.13	NO		17	A
			P32-75					.13	NO		18	
G 74	2		P22-49					.13	NO		17	A
			P32-49					.13	NO		18	
G 75	2		P22-55					.13	NO		17	A
			P32-55					.13	NO		18	
G 76	2		P22-56					.13	NO		17	A
			P32-56					.13	NO		18	
G 77	2		P22-43					.13	NO		17	A
			P32-43					.13	NO		18	
G 78	2		P22-44					.13	NO		17	A
			P32-44					.13	NO		18	
G 79	2		P22-54					.13	NO		17	A
			P32-54					.13	NO		18	

SIZE	CODE IDENT NO.	
A	80230	2014647
SCALE-NONE	REV LTR J	SHEET 22 OF 30

MIL 2084 9-65

LEAD IDENT	WIRE MATL ITEM	LEAD LG	CIRCUIT PT FROM (A) TO (B)	TERM.JKT AREA NO.	STRIP LG	SHLD STRIP LG	LEAD CUT LG	INS STRIP LG	TIN	NOTE ONE, FIG	ACCESSORY ITEMS	REMARKS
G 80	2		P22-59					.13	NO		17	A
			P32-59					.13	NO		18	
G 81	2		P22-34					.13	NO		17	A
			P32-34					.13	NO		18	
G 82	2		P22-83					.13	NO		17	A
			P32-83					.13	NO		18	
G 83	2		P22-57					.13	NO		17	A
			P32-57					.13	NO		18	
G 84	2		P22-58					.13	NO		17	A
			P32-58					.13	NO		18	
G 85	2		P22-39					.13	NO		17	A
			P32-39					.13	NO		18	
G 86	2		P22-35					.13	NO		17	A
			P32-35					.13	NO		18	
G 87	2		P22-64					.13	NO		17	A
			P32-64					.13	NO		18	
G 88	2		P22-65					.13	NO		17	A
			P32-65					.13	NO		18	
G 89	2		P22-40					.13	NO		17	A
			P32-40					.13	NO		18	
G 90	2		P22-32					.13	NO		17	A
			P32-32					.13	NO		18	
G 91	2		P22-31					.13	NO		17	A
			P32-31					.13	NO		18	

SIZE	CODE IDENT NO.	
A	80230	2014647
SCALE-NONE	REV LTR J	SHEET 23 OF 30

MIL 2084 9-65

LEAD IDENT	WIRE MATL ITEM	LEAD LG	CIRCUIT PT FROM (A) TO (B)	TERM.JKT AREA NO.	STRIP LG	SHLD STRIP LG	LEAD CUT LG	INS STRIP LG	TIN	NOTE ONE, FIG	ACCESSORY ITEMS	REMARKS
G 92	2		P22-78					.13	NO		17	A
			P32-78					.13	NO		18	
G 93	2		P22-42					.13	NO		17	A
			P32-42					.13	NO		18	
G 94	2		P22-41					.13	NO		17	A
			P32-41					.13	NO		18	
G 95	2		P22-38					.13	NO		17	A
			P32-38					.13	NO		18	
G 96	5											
G 96R			P20-26					.13	NO		18	
			P29-K18					.18	NO		21	BRANCH 2
G 96Y			P20-47					.13	NO		18	
			P29-H18					.18	NO		21	BRANCH 2
G 97	5											
G 97R			P20-13					.13	NO		18	
			P29-H19					.18	NO		21	BRANCH 2
G 97Y			P20-27					.13	NO		18	
			P29-K19					.18	NO		21	BRANCH 2
G 98	5											
G 98R			P20-51					.13	NO		18	
			P29-K20					.18	NO		21	BRANCH 2

SIZE	CODE IDENT NO.	
A	80230	2014647
SCALE-NONE	REV LTR J	SHEET 24 OF 30

MIL 2084 9-65

LEAD IDENT	WIRE MATL ITEM	LEAD LG	CIRCUIT PT FROM (A) TO (B)	TERM.JKT AREA NO.	STRIP LG	SHLD STRIP LG	LEAD CUT LG	INS STRIP LG	TIN	NOTE ONE, FIG	ACCESSORY ITEMS	REMARKS
G 98Y			P20-29					.13	NO		18	
			P29-H20					.18	NO		21	BRANCH 2
G 99	1		P20-62					.13	NO		18	
			P29-D19					.18	NO		20	BRANCH 2
G 100	2		P22-60					.13	NO		17	A
			P32-60					.13	NO		18	
G 101	2		P22-36					.13	NO		17	A
			P32-36					.13	NO		18	
G 102	2		P22-37					.13	NO		17	A
			P32-37					.13	NO		18	
G 103	2		P22-61					.13	NO		17	A
			P32-61					.13	NO		18	
G 104	2		P22-69					.13	NO		17	A
			P32-69					.13	NO		18	
G 105	2		P22-68					.13	NO		17	A
			P32-68					.13	NO		18	
G 106	2		P22-67					.13	NO		17	A
			P32-67					.13	NO		18	
G 107	2		P22-66					.13	NO		17	A
			P32-66					.13	NO		18	
G 112	5											
G 112R			P21-41					.13	NO		18	
			P29-A3					.18	NO		21	BRANCH 1

SIZE	CODE IDENT NO.	
A	80230	2014647
SCALE-NONE	REV LTR J	SHEET 25 OF 30

MIL 2084 9-65

LEAD IDENT	WIRE MATL ITEM	LEAD LG	CIRCUIT PT FROM (A) TO (B)	TERM.JKT AREA NO.	STRIP LG	SHLD STRIP LG	LEAD CUT LG	INS STRIP LG	TIN	NOTE ONE, FIG	ACCESSORY ITEMS	REMARKS
G 112Y			P21-22					.13	NO		18	
			P29-B3					.18	NO		21	BRANCH 1
G 113	2		P20-12					.13	NO		18	
			P29-K21					.18	NO		21	BRANCH 2
G 114	2		P20-77					.13	NO		18	
			P29-D21					.18	NO		21	BRANCH 2
G 115	3											
G 115R			J6-7					.13	NO		18	
			P29-A19					.18	NO		20	BRANCH 2
G 115Y			J6-4					.13	NO		18	
			P29-B19					.18	NO		20	BRANCH 2
G 116	3											
G 116R			J7-7					.13	NO		18	
			P29-A18					.18	NO		20	BRANCH 2
G 116Y			J7-4					.13	NO		18	
			P29-B18					.18	NO		20	BRANCH 2
G 117	2		P22-77					.13	NO		17	A
			P32-77					.13	NO		18	
G 118	2		P22-52					.13	NO		17	A
			P32-52					.13	NO		18	
G 119	2		P21-55					.13	NO		18	
			P29-A5					.18	NO		21	BRANCH 1

SIZE	CODE IDENT NO.	
A	80230	2014647
SCALE-NONE	REV LTR J	SHEET 26 OF 30

MIL 2084 9-65

LEAD IDENT	WIRE MATL ITEM	LEAD LG	CIRCUIT PT FROM (A) TO (B)	TERM.JKT AREA NO.	STRIP LG	SHLD STRIP LG	LEAD CUT LG	INS STRIP LG	TIN	NOTE ONE, FIG	ACCESSORY ITEMS	REMARKS
G 120	38		E35					.19	NO		37	A
			P32-81					.13	NO		18	
G 130	2		P20-67					.13	NO		18	
			P29-D25					.18	NO		21	
G 131	10				1.75	1.50				6B	25	
					1.75	1.50				6B	25	
G 131A	11		SHLD G131					.20	NO			
			P22-46					.13	NO		17	
G 131B	11		P32-46					.13	NO		18	
			SHLD G131					.20	NO			
G 131R			P22-45					.13	NO		17	
			P32-45					.13	NO		18	
G 131Y			P22-25					.13	NO		17	
			P32-25					.13	NO		18	
G 132	10				1.75	1.50				6B	25	
					1.75	1.50				6B	25	
G 132A	11		SHLD G132					.20	NO			
			P22-72					.13	NO		17	
G 132B	11		P32-72					.13	NO		18	
			SHLD G132					.20	NO			
G 132R			P22-70					.13	NO		17	
			P32-70					.13	NO		18	
G 132Y			P22-71					.13	NO		17	
			P32-71					.13	NO		18	

SIZE	CODE IDENT NO.	
A	80230	2014647
SCALE-NONE	REV LTR J	SHEET 27 OF 30

MIL 2084 9-65

LEAD IDENT	WIRE MATL ITEM	LEAD LG	CIRCUIT PT FROM (A) TO (B)	TERM.JKT AREA NO.	STRIP LG	SHLD STRIP LG	LEAD CUT LG	INS STRIP LG	TIN	NOTE ONE, FIG	ACCESSORY ITEMS	REMARKS
G 133	10				1.75	1.50				6B	25	
					1.75	1.50				6B	25	
G 133A	11		SHLD G133					.20	NO			
			P22-27					.13	NO		17	
G 133B	11		P32-27					.13	NO		18	
			SHLD G133					.20	NO			
G 133R			P22-47					.13	NO		17	
			P32-47					.13	NO		18	
G 133Y			P22-26					.13	NO		17	
			P32-26					.13	NO		18	
G 134	44				1.75	1.50				6B	46	
					1.00	.75				6B	46	
G 134A	11		SHLD G134					.20	NO			
			P20-9					.13	NO		18	
G 134B	11		P29-F23					.18	NO		20	BRANCH 2
			SHLD G134					.20	NO			
G 134L			NONE				1.75		NO			
			NONE				1.00		NO			
G 134R			P20-23					.13	NO		18, 45	
			P29-F25					.18	NO		21	BRANCH 2
G 134W			P20-24					.13	NO		18, 45	
			P29-F24					.18	NO		21	BRANCH 2
G 135	44				1.75	1.50				6B	46	
					1.00	.75				6B	46	

SIZE	CODE IDENT NO.	
A	80230	2014647
SCALE-NONE	REV LTR J	SHEET 28 OF 30

MIL 2084 9-65

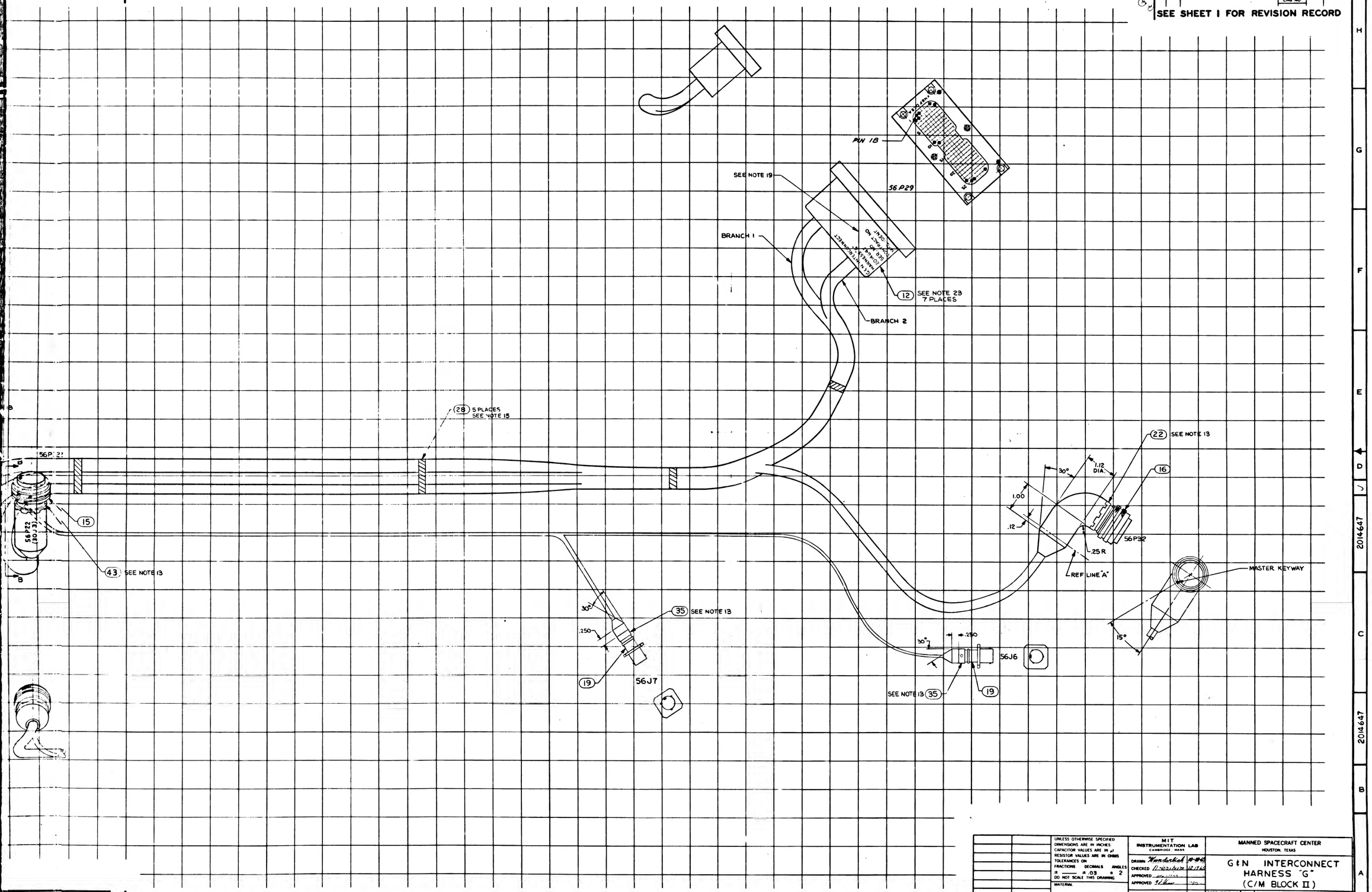
LEAD IDENT	WIRE MATL ITEM	LEAD LG	CIRCUIT PT FROM (A) TO (B)	TERM.JKT AREA NO.	STRIP LG	SHLD STRIP LG	LEAD CUT LG	INS STRIP LG	TIN	NOTE ONE, FIG	ACCESSORY ITEMS	REMARKS
G 135A	11		SHLD G135					.20	NO			
			P20-10					.13	NO		18	
G 135B	11		P29-G23					.18	NO		20	BRANCH 2
			SHLD G135					.20	NO			
G 135L			NONE				1.75		NO			
			NONE				1.00		NO			
G 135R			P20-3					.13	NO		18, 45	
			P29-G24					.18	NO		21	BRANCH 2
G 135W			P20-11					.13	NO		18, 45	
			P29-G25					.18	NO		21	BRANCH 2
G 136	44				1.75	1.50				6B	46	
					1.00	.75				6B	46	
G 136A	11		SHLD G136					.20	NO			
			P20-45					.13	NO		18	
G 136B	11		P29-H23					.18	NO		20	BRANCH 2
			SHLD G136					.20	NO			
G 136L			NONE				1.75		NO			
			NONE				1.50		NO			
G 136R			P20-25					.13	NO		18, 45	
			P29-H25					.18	NO		21	BRANCH 2
G 136W			P20-44					.13	NO		18, 45	
			P29-H24					.18	NO		21	BRANCH 2

SIZE	CODE IDENT NO.	
A	80230	2014647
SCALE-NONE	REV LTR J	SHEET 29 OF 30

MIL 2084 9-65

REVISIONS					
SYM	ZONE	DESCRIPTION	CHG NO	DATE	APPD

SEE SHEET 1 FOR REVISION RECORD



NEXT ASSY	USED ON	APPLICATION		

UNLESS OTHERWISE SPECIFIED DIMENSIONS ARE IN INCHES
CAPACITOR VALUES ARE IN μf
RESISTOR VALUES ARE IN OHMS
TOLERANCES ON
FRACTIONS ± — DECIMALS ± .03 ANGLES ± 2
DO NOT SCALE THIS DRAWING
MATERIAL —

MIT INSTRUMENTATION LAB
CAMBRIDGE, MASS

DRAWN	Wunderlich	10-8-65
CHECKED	11-10-21/11/64	12-17-65
APPROVED		
APPROVED		
APPROVED MIT		
APPROVED MSC		

MANNED SPACECRAFT CENTER
HOUSTON, TEXAS

G&N INTERCONNECT HARNESS "G" (C/M BLOCK II)

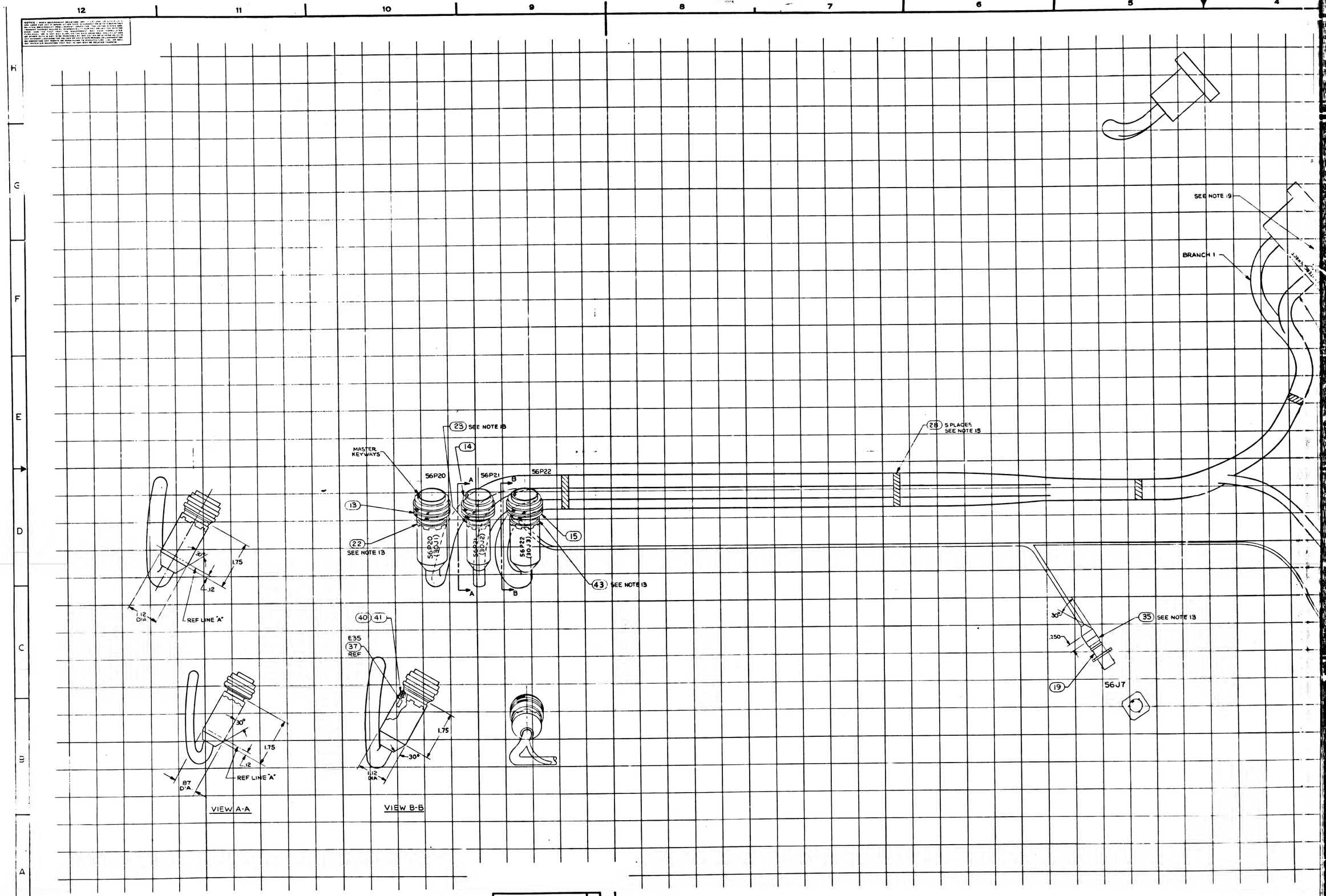
CODE IDENT NO	SIZE	DRAWING NO
80230	J	2014647

SCALE FULL — SHEET 2 OF 2

2014647

2014647

2/2014647



2014647 ✓

11/2014647

APPLICATION		REVISIONS			
NEXT ASSY	USED ON	SYM	DESCRIPTION	DATE	APPROVAL
2014567-011	2014567-011	E	REPLACES REV (D) WITH CHANGE PER MXC 207377	8 DEC 65	RLP
		F	ADDED CONFIGURATION AND CHANGED PER TDRR 24812		
		G	Revised per TDRR 25306	2/9/66	
		H	REVISED PER TDRR 27040	24 MAR 66	JB
		J	REVISED PER TDRR 28057	20 APR 66	
		K	REVISED PER TDRR 28410	11 MAY 66	DKD

REPLACES REV D WITH CHANGE

REV	K	K	K	K	K	K	K	K	K	K	K															
SHEET	20	21	22	23	24	25	26	27	28	29	30	31														
REV STATUS	REV							K	K	K	K	K	K	K	K	K	K	K	K	K	K	K	K	K	K	K
OF SHEETS	SHEET							1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16	17	18	19

MIT
INSTRUMENTATION LAB
CAMBRIDGE, MASS

DWG. NO. CONTRACT

MANNED
SPACECRAFT CENTER
HOUSTON, TEXAS

DRAWN 26 MAY 65 DATE
CHECKED 28 MAY 65
APPROVAL 29 AUG 65
APPROVAL 12/12/65

G & N INTERCONNECT HARNESS "G"

(C/M, BLOCK II)

NASA APPROVAL
MIT APPROVAL 8/21/66

CODE IDENT NO.	SIZE		REV
80230	A	2014647	K

CONTRACT NAS 9-497 SCALE — SHEET 1 OF 31

NOTE NUMBER	GENERAL NOTES DESCRIPTION
1	SHIELD TERMINATION FIGURES ARE PER ND1002071 FOR FIGURE 6B AND ND 1002032 FOR FIGURE 7.
2	INTERPRET DRAWING IN ACCORDANCE WITH STANDARDS PRESCRIBED BY MIL-D-70327.
3	INTERCONNECT LIST FOR THIS HARNESS IS 2014677.
4	PARTIAL CIRCUIT POINTS ARE SHOWN. PREFIX WITH UNIT NUMBER 56 FOR COMPLETE CIRCUIT POINT.
5	THE SUFFIX LETTER OF A CONDUCTOR IDENTIFICATION NUMBER IDENTIFIES A SHIELD LEAD, COLOR, OR MARKED LETTER. A - FROM END OF SHIELD B - TO END OF SHIELD G - GREEN K - BLACK L - BLUE N - BROWN R - RED W - WHITE Y - YELLOW
6	ASTERISK DENOTES LOWER CASE LETTER.
7	GRID MODULE ON PICTURE SHEET IS 1 INCH TRUE POSITION.
8	UNLESS OTHERWISE SPECIFIED FEATURE CENTERLINES ON PICTURE SHEET ARE LOCATED WITHIN + OR - .25. ENDS OF HOOKUP WIRES OR ACCESSORIES ARE LOCATED WITHIN .12.
9	VENDOR ITEM - SEE SOURCE CONTROL OR SPECIFICATION CONTROL DRAWING.
10	CRIMP CONTACTS PER ND1002032.

SIZE	CODE IDENT NO.		
A	80230	2014647	
SCALE-NONE	REV LTR K	SHEET 2 OF 31	

NOTE NUMBER	GENERAL NOTES DESCRIPTION
11	ALL UNUSED CONTACT CAVITIES SHALL BE FILLED WITH A CONTACT OR CONTACT AND SEALING PLUG AS FOLLOWS CONNECTOR 56P22, USE ITEM NUMBERS 17 AND 24. CONNECTOR 56P29, USE ITEM NUMBER 20. CONNECTORS 56P20,21, AND 32, USE ITEM NUMBERS 18 AND 24.
12	LACE HARNESS PER ND1002032 USING ITEM NUMBER 26.
13	A SMALL QUANTITY OF POTTING COMPOUND MUST BE PUT BETWEEN THE THREADED PORTION OF CONNECTOR AND SILICONE RUBBER GROMMET TO SEAL AND BOND RING TO CONNECTOR PRIOR TO POTTING.
14	ALL SHIELDED TERMINATIONS SHALL BE LOCATED BELOW REFERENCE LINE A. THERE SHALL BE NO EXPOSED CONDUCTORS AT THE SURFACE OF THE POTTING COMPOUND.
15	BEFORE LACING HARNESS, APPLY 2 TURNS OF TAPE, TO INDICATE CABLE CLAMP LOCATION.
16	WRAP TAPE AROUND HARNESS IN AREA SHOWN AS REQUIRED TO BUILD UP DIAMETER TO FIT SHELL HOLE.
17	MARK CONNECTOR WITH REFERENCE DESIGNATION AS SHOWN .12 HIGH, BLACK, HOT IMPRESSION STAMPING PER ND1002019, CENTRALIZE.
19	MARK CHARACTERS .12 HIGH, BLACK, PER ND1002019, SERIALIZE PER ND1002023.
20	CONTINUITY TEST PER CONDUCTOR CHART. RESISTANCE SHALL BE LESS THAN 1/2 OHM. TEST PER MIL-STD-202, METHOD 303.

SIZE	CODE IDENT NO.		
A	80230	2014647	
SCALE-NONE	REV LTR K	SHEET 3 OF 31	

NOTE NUMBER	GENERAL NOTES DESCRIPTION
21	INSULATION RESISTANCE SHALL BE GREATER THAN 100 MEGOHMS WITH 500 VDC APPLIED BETWEEN A. THE ASSEMBLY PINS AND STRUCTURE GROUND, EXCEPT THOSE PINS ELECTRICALLY CONNECTED TO STRUCTURE GROUND. B. EACH PIN AND ALL OTHER PINS NOT ELECTRICALLY CONNECTED, INCLUDING ALL SPARE PINS. TEST PER MIL-STD-202, METHOD 302, EXCEPT ELECTRIFICATION TIME NOT APPLICABLE.
22	PRESEAL BACK OF CONNECTOR P29 PRIOR TO ENCAPSULATION PER ND1002187 TYPE III USING ITEMS 31,32,33, AND 34.
23	ENCAPSULATE BACK OF CONNECTORS PER ND1002236 USING ITEMS 29 AND 30.
24	CONDUCTORS SHALL ENTER CONNECTOR 56P29 THROUGH THE APPROPRIATE BRANCH SPECIFIED IN THE REMARKS COLUMN.
25	GROUP SHIELDING - THREAD ONE CONTINUOUS LENGTH OF GROUND WIRE, ITEM 38, THROUGH CENTER OF EMI/RFI SHIELDING TAPE, ITEM 39. ALLOW 6 INCHES OF GROUND WIRE TO EXTEND BEYOND ENDS OF SHIELDING TAPE. WRAP CABLE WITH ONE CONTINUOUS LENGTH OF PREPARED SHIELDING. SUCCESSIVE TURNS SHALL OVERLAP BY APPROXIMATELY 1/2 THE WIDTH OF THE TAPE, WITH A MINIMUM OF RIDGES AND FOLDS.
26	COMPLETELY COVER SHIELD WITH ONE CONTINUOUS WRAP OF INSULATION TAPE, ITEM 27. SUCCESSIVE TURNS SHALL OVERLAP BY APPROXIMATELY 1/2 THE WIDTH OF THE TAPE WITH A MINIMUM OF RIDGES AND FOLDS.
27	ASSEMBLE INSULATION TUBING, ITEM 42, OVER GROUND WIRE AS REQUIRED TO REACH TERMINATION. ASSEMBLE SHRINK SLEEVING AS SHOWN.
28	LOOP LEADS BACK AND SPOT TIE TO WIRE JACKET

SIZE	CODE IDENT NO.		
A	80230	2014647	
SCALE-NONE	REV LTR K	SHEET 4 OF 31	

NOTE NUMBER	GENERAL NOTES DESCRIPTION
29	PERFORM WORKMANSHIP VIBRATION A. SINUSOIDAL SWEEP AT 3.5 G RMS. LIMITED TO 0.3 INCH PEAK TO PEAK DISPLACEMENT, FROM 10 TO 2000 CPS AT A RATE OF 4 OCTAVES PER MINUTE. B. VIBRATION ALONG THE X AXIS OF THE SPACE CRAFT. C. MONITOR FOR DISCONTINUITIES OF 10 MICRO SECONDS OR GREATER DURING VIBRATION. D. COMPLETE CONTINUITY AND INSULATION RESISTANCE TESTING MUST BE ACCOMPLISHED AFTER VIBRATION.

LEAD TOLERANCE CHART

	LEAD LG	JKT STRIP LG	SHIELD STRIP LG	LEAD CUT LG	INS STRIP LG
UNDER 3 INCHES	+ .12-.00	+.06-.06	+.06-.06	+.06-.06	+.06-.00
3 INCH TO 3 FT	+ .50-.00	+.25-.25	+.25-.25	+.25-.25	
3 FT TO 10 FT	+1.00-.00				
10 FT AND OVER	+2.00-.00				

SIZE	CODE IDENT NO.		
A	80230	2014647	
SCALE-NONE	REV LTR K	SHEET 5 OF 31	

SEE NOTE

LIST OF MATERIALS

NUMBER	ITEM	QTY	PART NO.	DESCRIPTION
	1	1	2014647- 1	WIRE PER 1010789-006, 22 AWG, YEL, 5 FT TOT LG
	2	1	2014647- 2	WIRE PER 1010789-016, 26 AWG, YEL, 265 FT TOT LG
	3	1	2014647- 3	WIRE PER 1010789-008, 22 AWG, YEL, RED, 5 FT TOT LG
	4	1	2014647- 4	WIRE PER 1010789-003, 24 AWG, YEL, RED, 5 FT TOT LG
	5	1	2014647- 5	WIRE PER 1010789-017, 26 AWG, YEL, RED, 75 FT TOT LG
	6	1	2014647- 6	WIRE PER 1010789-009, 22 AWG, YEL, RED, GRN, 5 FT TOT LG
	7	1	2014647- 7	WIRE PER 1010789-004, 24 AWG, YEL, RED, GRN, 5 FT TOT LG
	8	1	2014647- 8	WIRE PER 1010789-018, 26 AWG, YEL, RED, GRN, 5 FT TOT LG
	9	1	2014647- 9	WIRE PER 1010789-019, 26 AWG, YEL, RED, GRN, BRN, 5 FT TOT LG
	10	1	2014647- 10	WIRE PER 1010789-015, 26 AWG, YEL, RED, YEL JKT, 88 FT TOT LG
	11	1	2014647- 11	WIRE PER 1010789-002, 24 AWG, BLK, 15 FT TOT LG
	12	1	2014747	CONNECTOR, PLUG, ELECTRICAL (56P29)
9	13	1	1010929-002	CONNECTOR, PLUG, ELECTRICAL (56P20)
9	14	1	1010929-008	CONNECTOR, PLUG, ELECTRICAL (56P21)

SIZE	CODE IDENT NO.	
A	80230	2014647
SCALE-NONE	REV LTR K	SHEET 6 OF 31

MIL 2084 9-65

SEE NOTE

LIST OF MATERIALS

NUMBER	ITEM	QTY	PART NO.	DESCRIPTION
9	15	1	1010929-101	CONNECTOR, PLUG, ELECTRICAL (56P22)
9	16	1	1010929-001	CONNECTOR, PLUG, ELECTRICAL (56P32)
9	17	REF	1010770- 1	CONTACT, PIN, SUPPLIED WITH CONNECTOR 1010929
9	18	REF	1010770- 2	CONTACT, SOCKET, SUPPLIED WITH CONNECTORS 1010929 AND 1010930
9	19	3	1010930-017	CONNECTOR, RECEPTACLE, ELECTRICAL (56J6, 56J7, AND 56J8).
9	20	104	1010955- 1	CONTACT, MALE
9	21	80	1010955- 2	CONTACT, MALE
	22	2	2014670- 4	ADAPTER, CONNECTOR
	23	1	2014670- 5	ADAPTER, CONNECTOR
9	24	110	1010958- 1	PLUG, PROTECTIVE SEALING
9	25	19	1010402- 2	SLEEVE, SOLDER
9	26	AR	1012507- 4	TAPE, LACING
	27	AR	MIL-T-23594	TAPE, TEFLON, TYPE II, 1 INCH WIDE
	28	AR	MIL-T-23594	TAPE, TEFLON, TYPE II, 1/4 INCH WIDE
9	29	AR	1012503	COMPOUND, POTTING, POLYURETHANE
9	30	AR	1012504	PRIMER, METAL PARTS
9	31	AR	1006277	SILICA, PULVERIZED, PYROGENIC

SIZE	CODE IDENT NO.	
A	80230	2014647
SCALE-NONE	REV LTR K	SHEET 7 OF 31

MIL 2084 9-65

SEE NOTE

LIST OF MATERIALS

NUMBER	ITEM	QTY	PART NO.	DESCRIPTION
9	32	AR	1008822	COLORANT, EPOXY BASE
9	33	AR	1010661	EPOXY RESIN
9	34	AR	1010679	ADHESIVE, ACTIVATOR
	35	3	2014670-010	ADAPTER, CONNECTOR
9	36	19	1012534- 36	SLEEVING, INSULATION (HEAT SHRINKABLE)
	37	1	MS17182-1	TERMINAL LUG
	38	1	2014647-012	WIRE PER QQ-W-343, TYPE C, CLASS C, 22AWG, 16 FT TOT LG
	39	AR	1010989	TAPE, SHIELDING, EMI/RFI
	40	1	1006783- 93	SCREW, BUTTON HD
	41	1	MS35333-69	WASHER, LOCK
	42	AR	1006776- 44	INSULATION SLEEVING
	43	1	2014670- 11	ADAPTER, CONNECTOR
	44	1	2014647-013	WIRE PER 1010707-1, RED JKT, 29AWG, RED, WHT, BLU, 15 FT TOTAL LG.
9	45	6	1010862	BUSHING, SLEEVE
9	46	6	1010763- 2	SOLDER, SLEEVE
	47	1	2014647-014	WIRE PER 1010789-12, 24AWG, YEL, RED, YEL, JKT, 16 FT TOT LG.

SIZE	CODE IDENT NO.	
A	80230	2014647
SCALE-NONE	REV LTR K	SHEET 8 OF 31

MIL 2084 9-65

LEAD IDENT	WIRE MATL ITEM	LEAD LG	CIRCUIT PT FROM (A) TO (B)	TERM.JKT AREA NO.	STRIP LG	SHLD STRIP LG	LEAD CUT LG	INS STRIP LG	TIN	NOTE ONE, FIG	ACCESSORY ITEMS	REMARKS
G	1	5										
G	1R		P21-51 P29-H5					.13 .18	NO NO		18 21	BRANCH 1
G	1Y		P21-29 P29-K5					.13 .18	NO NO		18 21	BRANCH 1
G	2	5										
G	2R		P21-53 P29-K3					.13 .18	NO NO		18 21	BRANCH 1
G	2Y		P21-52 P29-K4					.13 .18	NO NO		18 21	BRANCH 1
G	3	5										
G	3R		P21-28 P29-K7					.13 .18	NO NO		18 21	BRANCH 1
G	3Y		P21-49 P29-K6					.13 .18	NO NO		18 21	BRANCH 1
G	6	5										
G	6R		P21-3 P29-G11					.13 .18	NO NO		18 21	BRANCH 1
G	6Y		P21-10 P29-h11					.13 .18	NO NO		18 21	BRANCH 1

SIZE	CODE IDENT NO.	
A	80230	2014647
SCALE-NONE	REV LTR K	SHEET 9 OF 31

MIL 2084 9-65

LEAD IDENT	WIRE MATL ITEM	LEAD LG	CIRCUIT PT FROM (A) TO (B)	TERM.JKT AREA NO.	STRIP LG	SHLD STRIP LG	LEAD CUT LG	INS STRIP LG	TIN	NOTE ONE, FIG	ACCESSORY ITEMS	REMARKS
G 7	10				1.75 1.00	1.50 .75				7 6B	36 25	
G 7B	11		P29-F2 SHLD G7					.18 .20	NO NO		20	BRANCH 1
G 7R			P21-39 P29-G2					.13 .18	NO NO		18 21	BRANCH 1
G 7Y			P21-38 P29-H2					.13 .18	NO NO		18 21	BRANCH 1
G 8	10				1.75 1.00	1.50 .75				7 6B	36 25	
G 8B	11		P29-F1 SHLD G8					.18 .20	NO NO		20	BRANCH 1
G 8R			P21-37 P29-G1					.13 .18	NO NO		18 21	BRANCH 1
G 8Y			P21-61 P29-H1					.13 .18	NO NO		18 21	BRANCH 1
G 9			DELETED									
G 9B			DELETED									
G 9R			DELETED									
G 9Y			DELETED									

SIZE	CODE IDENT NO.	
A	80230	2014647
SCALE-NONE	REV LTR K	SHEET 10 OF 31

MIL 2084 9-65

LEAD IDENT	WIRE MATL ITEM	LEAD LG	CIRCUIT PT FROM (A) TO (B)	TERM.JKT AREA NO.	STRIP LG	SHLD STRIP LG	LEAD CUT LG	INS STRIP LG	TIN	NOTE ONE, FIG	ACCESSORY ITEMS	REMARKS
G 10			DELETED									
G 10B			DELETED									
G 10R			DELETED									
G 10Y			DELETED									
G 11	10				1.75 1.00	1.50 .75				7 6B	36 25	
G 11B	11		P29-C6 SHLD G11					.18 .20	NO NO		20	BRANCH 1
G 11R			P21-17 P29-B6					.13 .18	NO NO		18 21	BRANCH 1
G 11Y			P21-16 P29-A6					.13 .18	NO NO		18 21	BRANCH 1
G 12	10				1.75 1.00	1.50 .75				7 6B	36 25	
G 12B	11		P29-D2 SHLD G12					.18 .20	NO NO		20	BRANCH 1
G 12R			P21-59 P29-C2					.13 .18	NO NO		18 21	BRANCH 1
G 12Y			P21-36 P29-B2					.13 .18	NO NO		18 21	BRANCH 1

SIZE	CODE IDENT NO.	
A	80230	2014647
SCALE-NONE	REV LTR K	SHEET 11 OF 31

MIL 2084 9-65

LEAD IDENT	WIRE MATL ITEM	LEAD LG	CIRCUIT PT FROM (A) TO (B)	TERM.JKT AREA NO.	STRIP LG	SHLD STRIP LG	LEAD CUT LG	INS STRIP LG	TIN	NOTE ONE, FIG	ACCESSORY ITEMS	REMARKS
G 13	10				1.75 1.00	1.50 .75				7 6B	36 25	
G 13B	11		P29-D1 SHLD G13					.18 .20	NO NO		20	BRANCH 1
G 13R			P21-57 P29-B1					.13 .18	NO NO		18 21	BRANCH 1
G 13Y			P21-58 P29-C1					.13 .18	NO NO		18 21	BRANCH 1
G 14	5											
G 14R			P21-42 P29-K9					.13 .18	NO NO		18 21	BRANCH 1
G 14Y			P21-43 P29-H9					.13 .18	NO NO		18 21	BRANCH 1
G 15	5											
G 15R			P21-24 P29-G9					.13 .18	NO NO		18 21	BRANCH 1
G 15Y			P21-44 P29-G10					.13 .18	NO NO		18 21	BRANCH 1
G 16	5											
G 16R			P21-46 P29-H10					.13 .18	NO NO		18 21	BRANCH 1

SIZE	CODE IDENT NO.	
A	80230	2014647
SCALE-NONE	REV LTR K	SHEET 12 OF 31

MIL 2084 9-65

LEAD IDENT	WIRE MATL ITEM	LEAD LG	CIRCUIT PT FROM (A) TO (B)	TERM.JKT AREA NO.	STRIP LG	SHLD STRIP LG	LEAD CUT LG	INS STRIP LG	TIN	NOTE ONE, FIG	ACCESSORY ITEMS	REMARKS
G 16Y			P21-25 P29-K10					.13 .18	NO NO		18 21	BRANCH 1
G 17	8											
G 17G			P21-26 P29-G12					.13 .18	NO NO		18 21	BRANCH 2
G 17R			P21-12 P29-H12					.13 .18	NO NO		18 21	BRANCH 2
G 17Y			P21-27 P29-H13					.13 .18	NO NO		18 21	BRANCH 2
G 18	5											
G 18R			P20-7 P29-K23					.13 .18	NO NO		18	BRANCH 2
G 18Y			P20-8 P29-K22					.13 .18	NO NO		18 21	BRANCH 2
G 19			DELETED									
G 19R			DELETED									
G 19Y			DELETED									
G 20			DELETED									

SIZE	CODE IDENT NO.	
A	80230	2014647
SCALE-NONE	REV LTR K	SHEET 13 OF 31

MIL 2084 9-65

LEAD IDENT	WIRE MATL ITEM	LEAD LG	CIRCUIT PT FROM (A) TO (B)	TERM. AREA NO.	JKT STRIP LG	SHLD STRIP LG	LEAD CUT LG	INS STRIP LG	TIN	NOTE ONE, FIG	ACCESSORY ITEMS	REMARKS
G	20R		DELETED									
G	20Y		DELETED									
G	21		DELETED									
G	21R		DELETED									
G	21Y		DELETED									
G	22	4										
G	22R		P20-5					.13	NO		18	
			P29-C23					.18	NO		20	BRANCH 2
G	22Y		P20-4					.13	NO		18	
			P29-C24					.18	NO		20	BRANCH 2
G	23	7										
G	23G		P20-30					.13	NO		18	
			P29-L25					.18	NO		20	BRANCH 2
G	23R		P20-15					.13	NO		18	
			P29-C25					.18	NO		20	BRANCH 2
G	23Y		P20-14					.13	NO		18	
			P29-B24					.18	NO		20	BRANCH 2

SIZE	CODE IDENT NO.	
A	80230	2014647
SCALE-NONE	REV LTR K	SHEET 14 OF 31

MIL 2084 9-65

LEAD IDENT	WIRE MATL ITEM	LEAD LG	CIRCUIT PT FROM (A) TO (B)	TERM. AREA NO.	JKT STRIP LG	SHLD STRIP LG	LEAD CUT LG	INS STRIP LG	TIN	NOTE ONE, FIG	ACCESSORY ITEMS	REMARKS
G	24	5										
G	24R		P20-46					.13	NO		18	
			P29-A23					.18	NO		21	BRANCH 2
G	24Y		P20-71					.13	NO		18	
			P29-B23					.18	NO		21	BRANCH 2
G	25	5										
G	25R		P20-73					.13	NO		18	
			P29-B22					.18	NO		21	BRANCH 2
G	25Y		P20-72					.13	NO		18	
			P29-A22					.18	NO		21	BRANCH 2
G	26	5										
G	26R		P20-28					.13	NO		18	
			P29-A21					.18	NO		21	BRANCH 2
G	26Y		P20-48					.13	NO		18	
			P29-B21					.18	NO		21	BRANCH 2
G	27	10			1.75	1.50				7	36	
					1.00	.75				6B	25	
G	27B	11	P29-C9					.18	NO		20	BRANCH 1
			SHLD G27					.20	NO			
G	27R		P20-80					.13	NO		18	
			P29-A9					.18	NO		21	BRANCH 1

SIZE	CODE IDENT NO.	
A	80230	2014647
SCALE-NONE	REV LTR K	SHEET 15 OF 31

MIL 2084 9-65

LEAD IDENT	WIRE MATL ITEM	LEAD LG	CIRCUIT PT FROM (A) TO (B)	TERM. AREA NO.	JKT STRIP LG	SHLD STRIP LG	LEAD CUT LG	INS STRIP LG	TIN	NOTE ONE, FIG	ACCESSORY ITEMS	REMARKS
G	27Y		P20-81					.13	NO		18	
			P29-B9					.18	NO		21	BRANCH 1
G	28	10			1.75	1.50				7	36	
					1.00	.75				6B	25	
G	28B	11	P29-C10					.18	NO		20	BRANCH 1
			SHLD G28					.20	NO			
G	28R		P20-57					.13	NO		18	
			P29-B10					.18	NO		21	BRANCH 1
G	28Y		P20-82					.13	NO		18	
			P29-A10					.18	NO		21	BRANCH 1
G	29	10			1.75	1.50				7	36	
					1.00	.75				6B	25	
G	29B	11	P29-D11					.18	NO		20	BRANCH 1
			SHLD G29					.20	NO			
G	29R		P20-85					.13	NO		18	
			P29-B11					.18	NO		21	BRANCH 1
G	29Y		P20-61					.13	NO		18	
			P29-C11					.18	NO		21	BRANCH 1
G	30	10			1.75	1.50				7	36	
					1.00	.75				6B	25	
G	30B	11	P29-D12					.18	NO		20	BRANCH 2
			SHLD G30					.20	NO			
G	30R		P20-83					.13	NO		18	
			P29-C12					.18	NO		21	BRANCH 2

SIZE	CODE IDENT NO.	
A	80230	2014647
SCALE-NONE	REV LTR K	SHEET 16 OF 31

MIL 2084 9-65

LEAD IDENT	WIRE MATL ITEM	LEAD LG	CIRCUIT PT FROM (A) TO (B)	TERM. AREA NO.	JKT STRIP LG	SHLD STRIP LG	LEAD CUT LG	INS STRIP LG	TIN	NOTE ONE, FIG	ACCESSORY ITEMS	REMARKS
G	30Y		P20-84					.13	NO		18	
			P29-B12					.18	NO		21	BRANCH 2
G	31	10			1.75	1.50				7	36	
					1.00	.75				6B	25	
G	31B	11	P29-D13					.18	NO		20	BRANCH 2
			SHLD G31					.20	NO			
G	31R		P20-59					.13	NO		18	
			P29-B13					.18	NO		21	BRANCH 2
G	31Y		P20-35					.13	NO		18	
			P29-C13					.18	NO		21	BRANCH 2
G	32	10			1.75	1.50				7	36	
					1.00	.75				6B	25	
G	32B	11	P29-D14					.18	NO		20	BRANCH 2
			SHLD G32					.20	NO			
G	32R		P20-34					.13	NO		18	
			P29-C14					.18	NO		21	BRANCH 2
G	32Y		P20-33					.13	NO		18	
			P29-B14					.18	NO		21	BRANCH 2
G	33	9										
G	33G		P20-22					.13	NO		18	
			P29-B15					.18	NO		21	BRANCH 2
G	33N		P20-40					.13	NO		18	
			P29-C15					.18	NO		21	BRANCH 2

SIZE	CODE IDENT NO.	
A	80230	2014647
SCALE-NONE	REV LTR K	SHEET 17 OF 31

MIL 2084 9-65

LEAD IDENT	WIRE MATL ITEM	LEAD LG	CIRCUIT PT FROM (A) TO (B)	TERM.JKT AREA NO.	TERM.JKT STRIP LG	SHLD STRIP LG	LEAD CUT LG	INS STRIP LG	TIN	NOTE ONE, FIG	ACCESSORY ITEMS	REMARKS
G 33R			P20-64					.13	NO		18	
			P29-C16					.18	NO		21	BRANCH 2
G 33Y			P20-39					.13	NO		18	
			P29-B16					.18	NO		21	BRANCH 2
G 35	6											
G 35G			P20-43					.13	NO		18	
			P29-C19					.18	NO		20	BRANCH 2
G 35R			P20-68					.13	NO		18	
			P29-C18					.18	NO		20	BRANCH 2
G 35Y			P20-69					.13	NO		18	
			P29-D18					.18	NO		20	BRANCH 2
G 36	3											
G 36R			P20-66					.13	NO		18	
			P29-A20					.18	NO		20	BRANCH 2
G 36Y			P20-42					.13	NO		18	
			P29-B20					.18	NO		20	BRANCH 2
G 37	5											
G 37R			P20-74					.13	NO		18	
			P29-C22					.18	NO		21	BRANCH 2
G 37Y			P20-75					.13	NO		18	
			P29-C21					.18	NO		21	BRANCH 2

SIZE	CODE IDENT NO.	
A	80230	2014647
SCALE-NONE	REV LTR K	SHEET 18 OF 31

MIL 2084 9-65

LEAD IDENT	WIRE MATL ITEM	LEAD LG	CIRCUIT PT FROM (A) TO (B)	TERM.JKT AREA NO.	TERM.JKT STRIP LG	SHLD STRIP LG	LEAD CUT LG	INS STRIP LG	TIN	NOTE ONE, FIG	ACCESSORY ITEMS	REMARKS
G 36	10				1.75	1.50				7	36	
					1.00	.75				6B	25	
G 38B	11		P29-G17					.18	NO		20	BRANCH 2
			SHLD G38					.20	NO			
G 38R			P20-79					.13	NO		18	
			P29-G15					.18	NO		21	BRANCH 2
G 38Y			P20-78					.13	NO		18	
			P29-G16					.18	NO		21	BRANCH 2
G 39	10				1.75	1.50				7	36	
					1.00	.75				6B	25	
G 39B	11		P29-H17					.18	NO		20	BRANCH 2
			SHLD G39					.20	NO			
G 39R			P20-54					.13	NO		18	
			P29-H16					.18	NO		21	BRANCH 2
G 39Y			P20-31					.13	NO		18	
			P29-H15					.18	NO		21	BRANCH 2
G 40	2		P22-1					.13	NO		17	A
			P32-1					.13	NO		18	
G 41	2		P22-5					.13	NO		17	A
			P32-5					.13	NO		18	
G 42	2		P22-6					.13	NO		17	A
			P32-6					.13	NO		18	
G 43	2		P22-16					.13	NO		17	A
			P32-16					.13	NO		18	

SIZE	CODE IDENT NO.	
A	80230	2014647
SCALE-NONE	REV LTR K	SHEET 19 OF 31

MIL 2084 9-65

LEAD IDENT	WIRE MATL ITEM	LEAD LG	CIRCUIT PT FROM (A) TO (B)	TERM.JKT AREA NO.	TERM.JKT STRIP LG	SHLD STRIP LG	LEAD CUT LG	INS STRIP LG	TIN	NOTE ONE, FIG	ACCESSORY ITEMS	REMARKS
G 44	2		P22-17					.13	NO		17	A
			P32-17					.13	NO		18	
G 45	2		P22-18					.13	NO		17	A
			P32-18					.13	NO		18	
G 46	2		P22-19					.13	NO		17	A
			P32-19					.13	NO		18	
G 47	2		P22-7					.13	NO		17	A
			P32-7					.13	NO		18	
G 48	2		P22-8					.13	NO		17	A
			P32-8					.13	NO		18	
G 49	2		P22-20					.13	NO		17	A
			P32-20					.13	NO		18	
G 50	2		P22-2					.13	NO		17	A
			P32-2					.13	NO		18	
G 51	2		P22-9					.13	NO		17	A
			P32-9					.13	NO		18	
G 52	2		P22-21					.13	NO		17	A
			P32-21					.13	NO		18	
G 53	2		P22-22					.13	NO		17	A
			P32-22					.13	NO		18	
G 54	2		P22-23					.13	NO		17	A
			P32-23					.13	NO		18	
G 55	2		P22-10					.13	NO		17	A
			P32-10					.13	NO		18	

SIZE	CODE IDENT NO.	
A	80230	2014647
SCALE-NONE	REV LTR K	SHEET 20 OF 31

MIL 2084 9-65

LEAD IDENT	WIRE MATL ITEM	LEAD LG	CIRCUIT PT FROM (A) TO (B)	TERM.JKT AREA NO.	TERM.JKT STRIP LG	SHLD STRIP LG	LEAD CUT LG	INS STRIP LG	TIN	NOTE ONE, FIG	ACCESSORY ITEMS	REMARKS
G 56	2		P22-24					.13	NO		17	A
			P32-24					.13	NO		18	
G 57	2		P22-3					.13	NO		17	A
			P32-3					.13	NO		18	
G 58	2		P22-11					.13	NO		17	A
			P32-11					.13	NO		18	
G 59	2		P22-79					.13	NO		17	A
			P32-79					.13	NO		18	
G 60	2		P22-13					.13	NO		17	A
			P32-13					.13	NO		18	
G 61	2		P22-33					.13	NO		17	A
			P32-33					.13	NO		18	
G 62	2		P22-4					.13	NO		17	A
			P32-4					.13	NO		18	
G 63	2		P22-12					.13	NO		17	A
			P32-12					.13	NO		18	
G 64	2		P22-74					.13	NO		17	A
			P32-74					.13	NO		18	
G 65	2		P22-14					.13	NO		17	A
			P32-14					.13	NO		18	
G 66	2		P22-29					.13	NO		17	A
			P32-29					.13	NO		18	
G 67	2		P22-30					.13	NO		17	A
			P32-30					.13	NO		18	

SIZE	CODE IDENT NO.	
A	80230	2014647
SCALE-NONE	REV LTR K	SHEET 21 OF 31

MIL 2084 9-65

LEAD IDENT	WIRE MATL ITEM	LEAD LG	CIRCUIT PT FROM (A) TO (B)	TERM.JKT AREA NO.	STRIP LG	SHLD STRIP LG	LEAD CUT LG	INS STRIP LG	TIN	NOTE ONE, FIG	ACCESSORY ITEMS	REMARKS
G 68	2		P22-15					.13	NO		17	A
			P32-15					.13	NO		18	
G 69	2		P22-28					.13	NO		17	A
			P32-28					.13	NO		18	
G 70	2		P22-50					.13	NO		17	A
			P32-50					.13	NO		18	
G 71	2		P22-51					.13	NO		17	A
			P32-51					.13	NO		18	
G 72	2		P22-76					.13	NO		17	A
			P32-76					.13	NO		18	
G 73	2		P22-75					.13	NO		17	A
			P32-75					.13	NO		18	
G 74	2		P22-49					.13	NO		17	A
			P32-49					.13	NO		18	
G 75	2		P22-55					.13	NO		17	A
			P32-55					.13	NO		18	
G 76	2		P22-56					.13	NO		17	A
			P32-56					.13	NO		18	
G 77	2		P22-43					.13	NO		17	A
			P32-43					.13	NO		18	
G 78	2		P22-44					.13	NO		17	A
			P32-44					.13	NO		18	
G 79	2		P22-54					.13	NO		17	A
			P32-54					.13	NO		18	

SIZE	CODE IDENT NO.	
A	80230	2014647
SCALE-NONE	REV LTR K	SHEET 22 OF 31

MIL 2004 9-65

LEAD IDENT	WIRE MATL ITEM	LEAD LG	CIRCUIT PT FROM (A) TO (B)	TERM.JKT AREA NO.	STRIP LG	SHLD STRIP LG	LEAD CUT LG	INS STRIP LG	TIN	NOTE ONE, FIG	ACCESSORY ITEMS	REMARKS
G 80	2		P22-59					.13	NO		17	A
			P32-59					.13	NO		18	
G 81	2		P22-34					.13	NO		17	A
			P32-34					.13	NO		18	
G 82	2		P22-83					.13	NO		17	A
			P32-83					.13	NO		18	
G 83	2		P22-57					.13	NO		17	A
			P32-57					.13	NO		18	
G 84	2		P22-58					.13	NO		17	A
			P32-58					.13	NO		18	
G 85	2		P22-39					.13	NO		17	A
			P32-39					.13	NO		18	
G 86	2		P22-35					.13	NO		17	A
			P32-35					.13	NO		18	
G 87	2		P22-64					.13	NO		17	A
			P32-64					.13	NO		18	
G 88	2		P22-65					.13	NO		17	A
			P32-65					.13	NO		18	
G 89	2		P22-40					.13	NO		17	A
			P32-40					.13	NO		18	
G 90	2		P22-32					.13	NO		17	A
			P32-32					.13	NO		18	
G 91	2		P22-31					.13	NO		17	A
			P32-31					.13	NO		18	

SIZE	CODE IDENT NO.	
A	80230	2014647
SCALE-NONE	REV LTR K	SHEET 23 OF 31

MIL 2004 9-65

LEAD IDENT	WIRE MATL ITEM	LEAD LG	CIRCUIT PT FROM (A) TO (B)	TERM.JKT AREA NO.	STRIP LG	SHLD STRIP LG	LEAD CUT LG	INS STRIP LG	TIN	NOTE ONE, FIG	ACCESSORY ITEMS	REMARKS
G 92	2		P22-78					.13	NO		17	A
			P32-78					.13	NO		18	
G 93	2		P22-42					.13	NO		17	A
			P32-42					.13	NO		18	
G 94	2		P22-41					.13	NO		17	A
			P32-41					.13	NO		18	
G 95	2		P22-38					.13	NO		17	A
			P32-38					.13	NO		18	
G 96	5											
G 96R			P20-26					.13	NO		18	
			P29-K18					.18	NO		21	BRANCH 2
G 96Y			P20-47					.13	NO		18	
			P29-H18					.18	NO		21	BRANCH 2
G 97	5											
G 97R			P20-13					.13	NO		18	
			P29-H19					.18	NO		21	BRANCH 2
G 97Y			P20-27					.13	NO		18	
			P29-K19					.18	NO		21	BRANCH 2
G 98	5											
G 98R			P20-51					.13	NO		18	
			P29-K20					.18	NO		21	BRANCH 2

SIZE	CODE IDENT NO.	
A	80230	2014647
SCALE-NONE	REV LTR K	SHEET 24 OF 31

MIL 2004 9-65

LEAD IDENT	WIRE MATL ITEM	LEAD LG	CIRCUIT PT FROM (A) TO (B)	TERM.JKT AREA NO.	STRIP LG	SHLD STRIP LG	LEAD CUT LG	INS STRIP LG	TIN	NOTE ONE, FIG	ACCESSORY ITEMS	REMARKS
G 98Y			P20-29					.13	NO		18	
			P29-H20					.18	NO		21	BRANCH 2
G 99	1		P20-62					.13	NO		18	
			P29-D19					.18	NO		20	BRANCH 2
G 100	2		P22-60					.13	NO		17	A
			P32-60					.13	NO		18	
G 101	2		P22-36					.13	NO		17	A
			P32-36					.13	NO		18	
G 102	2		P22-37					.13	NO		17	A
			P32-37					.13	NO		18	
G 103	2		P22-61					.13	NO		17	A
			P32-61					.13	NO		18	
G 104	2		P22-69					.13	NO		17	A
			P32-69					.13	NO		18	
G 105	2		P22-68					.13	NO		17	A
			P32-68					.13	NO		18	
G 106	2		P22-67					.13	NO		17	A
			P32-67					.13	NO		18	
G 107	2		P22-66					.13	NO		17	A
			P32-66					.13	NO		18	
G 112	5											
G 112R			P21-41					.13	NO		18	
			P29-A3					.18	NO		21	BRANCH 1

SIZE	CODE IDENT NO.	
A	80230	2014647
SCALE-NONE	REV LTR K	SHEET 25 OF 31

MIL 2004 9-65

LEAD IDENT	WIRE MATL ITEM	LEAD LG	CIRCUIT PT FROM (A) TO (B)	TERM.JKT AREA NO.	STRIP LG	SHLD STRIP LG	LEAD CUT LG	INS STRIP LG	TIN	NOTE ONE, FIG	ACCESSORY ITEMS	REMARKS
G 112Y			P21-22					.13	NO		18	
			P29-B3					.18	NO		21	BRANCH 1
G 113	2		P20-12					.13	NO		18	
			P29-K21					.18	NO		21	BRANCH 2
G 114	2		P20-77					.13	NO		18	
			P29-D21					.18	NO		21	BRANCH 2
G 115			DELETED									
G 115R			DELETED									
G 115Y			DELETED									
G 116			DELETED									
G 116R			DELETED									
G 116Y			DELETED									
G 117	2		P22-77					.13	NO		17	A
			P32-77					.13	NO		18	
G 118	2		P22-52					.13	NO		17	A
			P32-52					.13	NO		18	
G 119	2		P21-55					.13	NO		18	
			P29-A5					.18	NO		21	BRANCH 1

SIZE	CODE IDENT NO.	
A	80230	2014647
SCALE-NONE	REV LTR K	SHEET 26 OF 31

MIL 2084 9-65

LEAD IDENT	WIRE MATL ITEM	LEAD LG	CIRCUIT PT FROM (A) TO (B)	TERM.JKT AREA NO.	STRIP LG	SHLD STRIP LG	LEAD CUT LG	INS STRIP LG	TIN	NOTE ONE, FIG	ACCESSORY ITEMS	REMARKS
G 120	38		E35					.19	NO		37	A
			P32-81					.13	NO		18	
G 130	2		P20-67					.13	NO		18	
			P29-D25					.18	NO		21	
G 131	10				1.75	1.50				6B	25	
					1.75	1.50				6B	25	
G 131A	11		SHLD G131					.20	NO			
			P22-46					.13	NO		17	
G 131B	11		P32-46					.13	NO		18	
			SHLD G131					.20	NO			
G 131R			P22-45					.13	NO		17	
			P32-45					.13	NO		18	
G 131Y			P22-25					.13	NO		17	
			P32-25					.13	NO		18	
G 132	10				1.75	1.50				6B	25	
					1.75	1.50				6B	25	
G 132A	11		SHLD G132					.20	NO			
			P22-72					.13	NO		17	
G 132B	11		P32-72					.13	NO		18	
			SHLD G132					.20	NO			
G 132R			P22-70					.13	NO		17	
			P32-70					.13	NO		18	
G 132Y			P22-71					.13	NO		17	
			P32-71					.13	NO		18	

SIZE	CODE IDENT NO.	
A	80230	2014647
SCALE-NONE	REV LTR K	SHEET 27 OF 31

MIL 2084 9-65

LEAD IDENT	WIRE MATL ITEM	LEAD LG	CIRCUIT PT FROM (A) TO (B)	TERM.JKT AREA NO.	STRIP LG	SHLD STRIP LG	LEAD CUT LG	INS STRIP LG	TIN	NOTE ONE, FIG	ACCESSORY ITEMS	REMARKS
G 133	10				1.75	1.50				6B	25	
					1.75	1.50				6B	25	
G 133A	11		SHLD G133					.20	NO			
			P22-27					.13	NO		17	
G 133B	11		P32-27					.13	NO		18	
			SHLD G133					.20	NO			
G 133R			P22-47					.13	NO		17	
			P32-47					.13	NO		18	
G 133Y			P22-26					.13	NO		17	
			P32-26					.13	NO		18	
G 134	44				1.75	1.50				6B	46	
					1.00	.75				6B	46	
G 134A	11		SHLD G134					.20	NO			
			P20-9					.13	NO		18	
G 134B	11		P29-F23					.18	NO		20	BRANCH 2
			SHLD G134					.20	NO			
G 134L			NONE				1.75		NO			
			NONE				1.00		NO			
G 134R			P20-23					.13	NO		18, 45	
			P29-F25					.18	NO		21	BRANCH 2
G 134W			P20-24					.13	NO		18, 45	
			P29-F24					.18	NO		21	BRANCH 2
G 135	44				1.75	1.50				6B	46	
					1.00	.75				6B	46	

SIZE	CODE IDENT NO.	
A	80230	2014647
SCALE-NONE	REV LTR K	SHEET 28 OF 31

MIL 2084 9-65

LEAD IDENT	WIRE MATL ITEM	LEAD LG	CIRCUIT PT FROM (A) TO (B)	TERM.JKT AREA NO.	STRIP LG	SHLD STRIP LG	LEAD CUT LG	INS STRIP LG	TIN	NOTE ONE, FIG	ACCESSORY ITEMS	REMARKS
G 135A	11		SHLD G135					.20	NO			
			P20-10					.13	NO		18	
G 135B	11		P29-G23					.18	NO		20	BRANCH 2
			SHLD G135					.20	NO			
G 135L			NONE				1.75		NO			
			NONE				1.00		NO			
G 135R			P20-3					.13	NO		18, 45	
			P29-G24					.18	NO		21	BRANCH 2
G 135W			P20-11					.13	NO		18, 45	
			P29-G25					.18	NO		21	BRANCH 2
G 136	44				1.75	1.50				6B	46	
					1.00	.75				6B	46	
G 136A	11		SHLD G136					.20	NO			
			P20-45					.13	NO		18	
G 136B	11		P29-H23					.18	NO		20	BRANCH 2
			SHLD G136					.20	NO			
G 136L			NONE				1.75		NO			
			NONE				1.50		NO			
G 136R			P20-25					.13	NO		18, 45	
			P29-H25					.18	NO		21	BRANCH 2
G 136W			P20-44					.13	NO		18, 45	
			P29-H24					.18	NO		21	BRANCH 2
G 137	10				1.75	1.50				7	36	
					1.00	.75				7	36	

SIZE	CODE IDENT NO.	
A	80230	2014647
SCALE-NONE	REV LTR K	SHEET 29 OF 31

MIL 2084 9-65

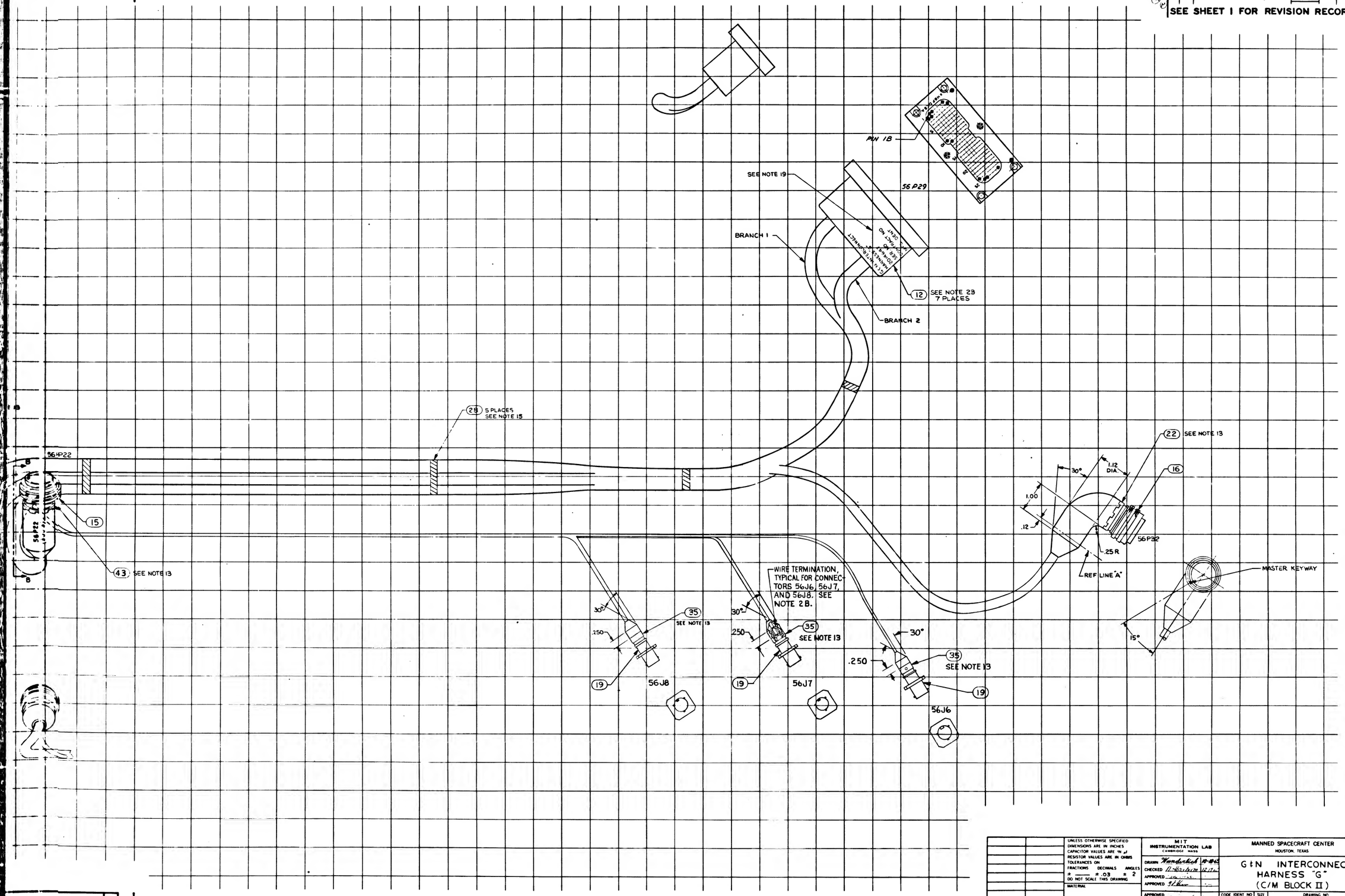
LEAD IDENT	WIRE MATL ITEM	LEAD LG	CIRCUIT PT FROM (A) TO (B)	TERM. AREA NO.	JKT STRIP LG	SHLD STRIP LG	LEAD CUT LG	INS STRIP LG	TIN	NOTE ONE, FIG	ACCESSORY ITEMS	REMARKS
G 137R			J7-7					.13	NO		18	
			P29-A18					.22	NO			BRANCH 2
G 137Y			J7-4					.13	NO		18	
			P29-B18					.22	NO			BRANCH 2
G 138	10				1.75	1.50				7	36	
					1.00	.75				7	36	
G 138R			J8-7					.13	NO		18	
			P29-A18					.22	NO		20	BRANCH 2
G 138Y			J8-4					.13	NO		18	
			P29-B18					.22	NO		20	BRANCH 2
G 139	47				1.75	1.50				7	36	
					1.00	.75				7	36	
G 139R			J6-7					.13	NO		18	
			P29-A19					.18	NO		20	BRANCH 2
G 139Y			J6-4					.13	NO		18	
			P29-B19					.18	NO		20	BRANCH 2

SIZE	CODE IDENT NO.	
A	80230	2014647
SCALE-NONE	REV LTR K	SHEET 30 OF 31

MIL 2484 X-65

REVISIONS				
SYM	ZONE	DESCRIPTION	DATE	APPD
		CHG NO		

SEE SHEET 1 FOR REVISION RECORD



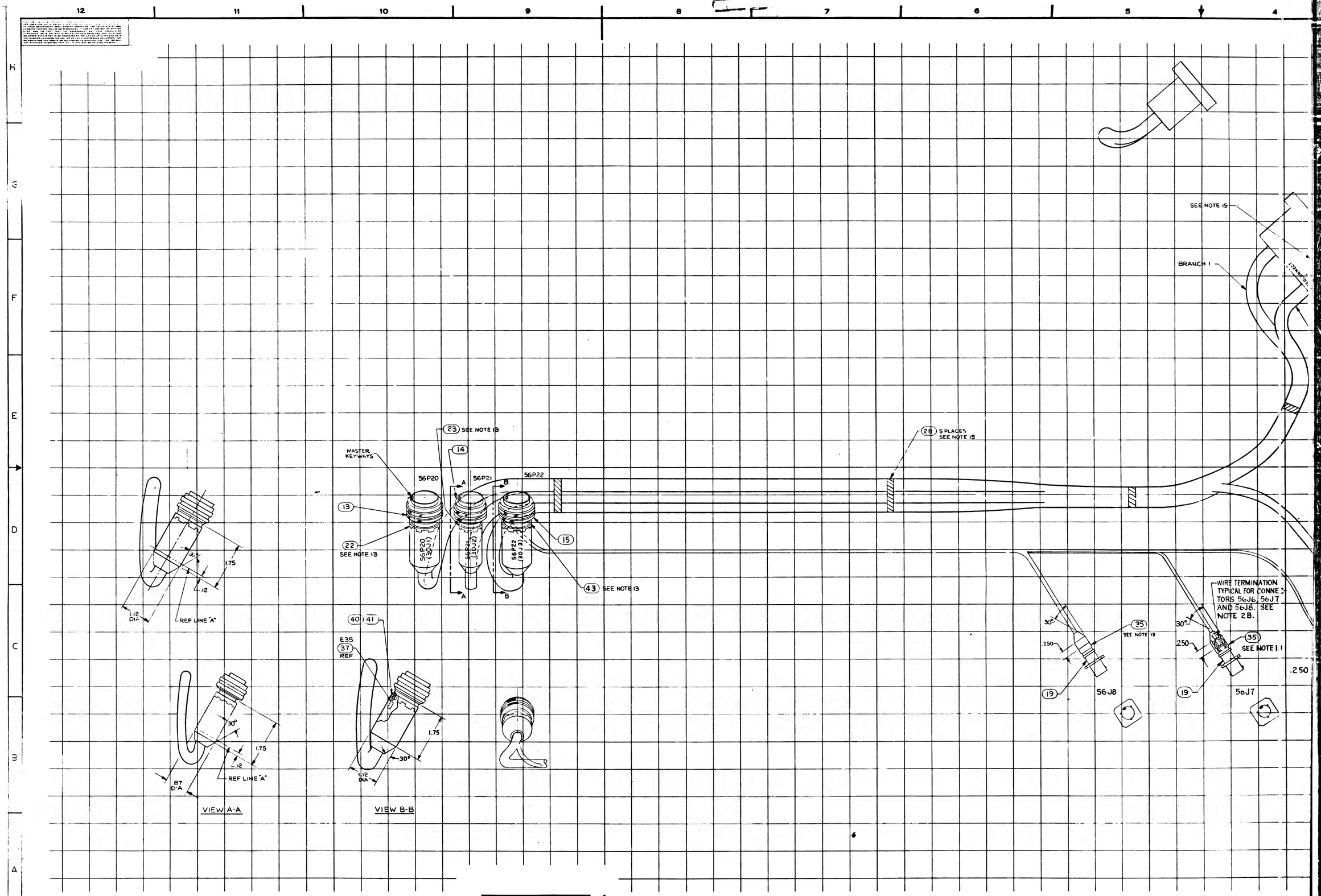
NEXT ASSY	USED ON	UNLESS OTHERWISE SPECIFIED DIMENSIONS ARE IN INCHES CAPACITOR VALUES ARE IN μf RESISTOR VALUES ARE IN OHMS TOLERANCES ON FRACTIONS ± DECIMALS ± .03 ANGLES ± 2 DO NOT SCALE THIS DRAWING	MIT INSTRUMENTATION LAB CAMBRIDGE MASS	MANNED SPACECRAFT CENTER HOUSTON, TEXAS
APPLICATION		MATERIAL	DRAWN Wanderlich 10-8-65 CHECKED 11-Nov-65 APPROVED APPROVED	G&N INTERCONNECT HARNESS "G" (C/M BLOCK II)
			APPROVED MIT APPROVED MSC DATE	CODE IDENT NO 80230 SIZE J DRAWING NO. 2014647
				SCALE FULL SHEET 31 OF 31

2014647

2014647

2014647

2/2014647



2014647 K

1/2014647

APPLICATION		REVISIONS			
NEXT ASSY	USED ON	SYM	DESCRIPTION	DATE	APPROVAL
2014567-011	2014567-011	E	REPLACES REV (D) WITH CHANGE PER MXC 207377	8 DEC 65	RLP
		F	ADDED CONFIGURATION AND CHANGED PER TDRR 24812		
		G	Revised per TDRR 25306	2/9/66	
		H	REVISED PER TDRR 27040	24 MAR 66	JB
		J	REVISED PER TDRR 2805	20 APR 66	
		K	REVISED PER TDRR 28410	11 MAY 66	
		L	REVISED PER TDRR 28842	6 MAY 66	

REPLACES REV D WITH CHANGE

REV	K	K	K	K	K	K	K	K	K	K	K	L													
SHEET	20	21	22	23	24	25	26	27	28	29	30	31													
REV STATUS OF SHEETS	REV							L	K	L	L	K	K	L	L	K	K	K	L	K	K	K	K	K	K
	SHEET							1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16	17	18

MIT
INSTRUMENTATION LAB
CAMBRIDGE MASS

DWG NO CONTRACT

DRAWN Janowiak DATE 26 MAY 65
CHECKED 28 MAY 65
APPROVAL 29 AUG 65
APPROVAL

MANNED
SPACECRAFT CENTER
HOUSTON, TEXAS

G & N INTERCONNECT HARNESS "G"

(C/M, BLOCK II)

NASA APPROVAL
MIT APPROVAL

CODE IDENT NO.	SIZE		REV
80230	A	2014647	L

CONTRACT NAS 9-497 SCALE — SHEET 1 OF 31

NOTE NUMBER	GENERAL NOTES DESCRIPTION
1	SHIELD TERMINATION FIGURES ARE PER ND1002071 FOR FIGURE 6B AND ND 1002032 FOR FIGURE 7.
2	INTERPRET DRAWING IN ACCORDANCE WITH STANDARDS PRESCRIBED BY MIL-D-70327.
3	INTERCONNECT LIST FOR THIS HARNESS IS 2014677.
4	PARTIAL CIRCUIT POINTS ARE SHOWN. PREFIX WITH UNIT NUMBER 56 FOR COMPLETE CIRCUIT POINT.
5	THE SUFFIX LETTER OF A CONDUCTOR IDENTIFICATION NUMBER IDENTIFIES A SHIELD LEAD, COLOR, OR MARKED LETTER. A - FROM END OF SHIELD B - TO END OF SHIELD G - GREEN K - BLACK L - BLUE N - BROWN R - RED W - WHITE Y - YELLOW
6	ASTERISK DENOTES LOWER CASE LETTER.
7	GRID MODULE ON PICTURE SHEET IS 1 INCH TRUE POSITION.
8	UNLESS OTHERWISE SPECIFIED FEATURE CENTERLINES ON PICTURE SHEET ARE LOCATED WITHIN + OR - .25. ENDS OF HOOKUP WIRES OR ACCESSORIES ARE LOCATED WITHIN .12.
9	VENDOR ITEM - SEE SOURCE CONTROL OR SPECIFICATION CONTROL DRAWING.
10	CRIMP CONTACTS PER ND1002032.

NOTE NUMBER	GENERAL NOTES DESCRIPTION
11	ALL UNUSED CONTACT CAVITIES SHALL BE FILLED WITH A CONTACT OR CONTACT AND SEALING PLUG AS FOLLOWS CONNECTOR 56P22, USE ITEM NUMBERS 17 AND 24. CONNECTOR 56P29, USE ITEM NUMBER 20. CONNECTORS 56P20,21, AND 32, USE ITEM NUMBERS 18 AND 24. CONNECTORS 56J6, 7, AND 8, USE ITEM NUMBERS 18 AND 24.
12	LACE HARNESS PER ND1002032 USING ITEM NUMBER 26.
13	APPLY BONDING MATERIAL PER ND1002187 TYPE I, USING ITEMS 33 AND 34 TO THE THREADED PORTION OF THE ADAPTER AND TO THE THREADED PORTION OF THE CONNECTOR PRIOR TO ASSEMBLY.
14	ALL SHIELDED TERMINATIONS SHALL BE LOCATED BELOW REFERENCE LINE A. THERE SHALL BE NO EXPOSED CONDUCTOR OR ACCESSORIES AT THE SURFACE OF THE POTTING COMPOUND.
15	BEFORE LACING HARNESS, APPLY 2 TURNS OF TAPE, TO INDICATE CABLE CLAMP LOCATION.
16	WRAP TAPE AROUND HARNESS IN AREA SHOWN AS REQUIRED TO BUILD UP DIAMETER TO FIT SHELL HOLE.
17	MARK CONNECTOR WITH REFERENCE DESIGNATION AS SHOWN .12 HIGH, BLACK, PER ND1002G19, CENTRALIZE.
19	MARK CHARACTERS .12 HIGH, BLACK, PER ND1002019, SERIALIZE PER ND1002023.
20	CONTINUITY TEST PER CONDUCTOR CHART. RESISTANCE SHALL BE LESS THAN 1/2 OHM, EXCEPT FOR CONDUCTORS USING ITEM NUMBER 44. THESE SHALL BE LESS THAN 2 OHMS. TEST PER MIL-STD-202, METHOD 303.

NOTE NUMBER	GENERAL NOTES DESCRIPTION
21	INSULATION RESISTANCE SHALL BE GREATER THAN 100 MEGOHMS WITH 500 VDC APPLIED BETWEEN A. THE ASSEMBLY PINS AND STRUCTURE GROUND, EXCEPT THOSE PINS ELECTRICALLY CONNECTED TO STRUCTURE GROUND. B. EACH PIN AND ALL OTHER PINS NOT ELECTRICALLY CONNECTED, INCLUDING ALL SPARE PINS. TEST PER MIL-STD-202, METHOD 302, EXCEPT ELECTRIFICATION TIME NOT APPLICABLE. SHORT CIRCUIT CURRENT SHALL BE LIMITED TO 15 MA.
22	PRESEAL BACK OF CONNECTOR P29 PRIOR TO ENCAPSULATION PER ND1002187 TYPE III USING ITEMS 31,32,33, AND 34.
23	ENCAPSULATE BACK OF CONNECTORS PER ND1002236 USING ITEMS 29 AND 30.
24	CONDUCTORS SHALL ENTER CONNECTOR 56P29 THROUGH THE APPROPRIATE BRANCH SPECIFIED IN THE REMARKS COLUMN.
25	GROUP SHIELDING - THREAD ONE CONTINUOUS LENGTH OF GROUND WIRE, ITEM 38, THROUGH CENTER OF EMI/RFI SHIELDING TAPE, ITEM 39. ALLOW 6 INCHES OF GROUND WIRE TO EXTEND BEYOND ENDS OF SHIELDING TAPE. WRAP CABLE WITH ONE CONTINUOUS LENGTH OF PREPARED SHIELDING. SUCCESSIVE TURNS SHALL OVERLAP BY APPROXIMATELY 1/2 THE WIDTH OF THE TAPE, WITH A MINIMUM OF RIDGES AND FOLDS.
26	COMPLETELY COVER SHIELD WITH ONE CONTINUOUS WRAP OF INSULATION TAPE, ITEM 27. SUCCESSIVE TURNS SHALL OVERLAP BY APPROXIMATELY 1/2 THE WIDTH OF THE TAPE WITH A MINIMUM OF RIDGES AND FOLDS.
27	ASSEMBLE INSULATION TUBING, ITEM 42, OVER GROUND WIRE AS REQUIRED TO REACH TERMINATION. ASSEMBLE SHRINK SLEEVING AS SHOWN.
28	LOOP LEADS BACK AND SPOT TIE TO WIRE JACKET

NOTE NUMBER	GENERAL NOTES DESCRIPTION
29	PERFORM WORKMANSHIP VIBRATION A. SINUSOIDAL SWEEP AT 3.5 G RMS. LIMITED TO 0.3 INCH PEAK TO PEAK DISPLACEMENT, FROM 10 TO 2000 CPS AT A RATE OF 4 OCTAVES PER MINUTE. B. VIBRATION ALONG THE X AXIS OF THE SPACE CRAFT. C. MONITOR FOR DISCONTINUITIES OF 10 MICRO SECONDS OR GREATER DURING VIBRATION. D. COMPLETE CONTINUITY AND INSULATION RESISTANCE TESTING MUST BE ACCOMPLISHED AFTER VIBRATION.

LEAD TOLERANCE CHART

	LEAD LG	JKT STRIP LG	SHIELD STRIP LG	LEAD CUT LG	INS STRIP LG
UNDER 3 INCHES	+ .12-.00	+.06-.06	+.06-.06	+.06-.06	+.06-.00
3 INCH TO 3 FT	+ .50-.00	+.25-.25	+.25-.25	+.25-.25	
3 FT TO 10 FT	+1.00-.00				
10 FT AND OVER	+2.00-.00				

SEE NOTE — LIST OF MATERIALS

NUMBER	ITEM	QTY	PART NO.	DESCRIPTION
	1	1	2014647- 1	WIRE PER 1010789-006, 22 AWG, YEL, 5 FT TOT LG
	2	1	2014647- 2	WIRE PER 1010789-016, 26 AWG, YEL, 265 FT TOT LG
	3	1	2014647- 3	WIRE PER 1010789-008, 22 AWG, YEL, RED, 5 FT TOT LG
	4	1	2014647- 4	WIRE PER 1010789-003, 24 AWG, YEL, RED, 5 FT TOT LG
	5	1	2014647- 5	WIRE PER 1010789-017, 26 AWG, YEL, RED, 75 FT TOT LG
	6	1	2014647- 6	WIRE PER 1010789-009, 22 AWG, YEL, RED, GRN, 5 FT TOT LG
	7	1	2014647- 7	WIRE PER 1010789-004, 24 AWG, YEL, RED, GRN, 5 FT TOT LG
	8	1	2014647- 8	WIRE PER 1010789-018, 26 AWG, YEL, RED, GRN, 5 FT TOT LG
	9	1	2014647- 9	WIRE PER 1010789-019, 26 AWG, YEL, RED, GRN, BRN, 5 FT TOT LG
	10	1	2014647- 10	WIRE PER 1010789-015, 26 AWG, YEL, RED, YEL JKT, 88 FT TOT LG
	11	1	2014647- 11	WIRE PER 1010789-002, 24 AWG, BLK, 15 FT TOT LG
	12	1	2014747	CONNECTOR, PLUG, ELECTRICAL (56P29)
9	13	1	1010929-002	CONNECTOR, PLUG, ELECTRICAL (56P20)
9	14	1	1010929-008	CONNECTOR, PLUG, ELECTRICAL (56P21)

SIZE	CODE IDENT NO.		
A	80230	2014647	
SCALE-NONE	REV LTR K	SHEET 6 OF 31	

SEE NOTE — LIST OF MATERIALS

NUMBER	ITEM	QTY	PART NO.	DESCRIPTION
9	15	1	1010929-101	CONNECTOR, PLUG, ELECTRICAL (56P22)
9	16	1	1010929-001	CONNECTOR, PLUG, ELECTRICAL (56P32)
9	17	REF	1010770- 1	CONTACT, PIN, SUPPLIED WITH CONNECTOR 1010929
9	18	REF	1010770- 2	CONTACT, SOCKET, SUPPLIED WITH CONNECTORS 1010929 AND 1010930
9	19	3	1010930-017	CONNECTOR, RECEPTACLE, ELECTRICAL (56J6, 56J7, AND 56J8).
9	20	107	1010955- 1	CONTACT, MALE
9	21	75	1010955- 2	CONTACT, MALE
	22	2	2014670- 4	ADAPTER, CONNECTOR
	23	1	2014670- 5	ADAPTER, CONNECTOR
9	24	91	1010958- 1	PLUG, PROTECTIVE SEALING
9	25	19	1010402- 2	SLEEVE, SOLDER
9	26	AR	1012507- 4	TAPE, LACING
	27	AR	MIL-T-23594	TAPE, TEFLON, TYPE II, 1 INCH WIDE
	28	AR	MIL-T-23594	TAPE, TEFLON, TYPE II, 1/4 INCH WIDE
9	29	AR	1012503	COMPOUND, POTTING, POLYURETHANE
9	30	AR	1012504	PRIMER, METAL PARTS
9	31	AR	1006277	SILICA, PULVERIZED, PYROGENIC

SIZE	CODE IDENT NO.		
A	80230	2014647	
SCALE-NONE	REV LTR L	SHEET 7 OF 31	

SEE NOTE — LIST OF MATERIALS

NUMBER	ITEM	QTY	PART NO.	DESCRIPTION
9	32	AR	1006622	COLORANT, EPOXY BASE
9	33	AR	1010661	EPOXY RESIN
9	34	AR	1010679	ADHESIVE, ACTIVATOR
	35	3	2014670-010	ADAPTER, CONNECTOR
9	36	19	1012534- 36	SLEEVING, INSULATION (HEAT SHRINKABLE)
	37	1	MS17182-1	TERMINAL LUG
	38	1	2014647-012	WIRE PER QQ-W-343, TYPE C, CLASS C, UNCOATED, SILVER PLATED, 22AWG, 16 FT TOT LG.
	39	AR	1010989	TAPE, SHIELDING, EMI/RFI
	40	1	1006783- 93	SCREW, BUTTON HD
	41	1	MS35333-69	WASHER, LOCK
	42	AR	1006776- 19	INSULATION SLEEVING
	43	1	2014670- 11	ADAPTER, CONNECTOR
	44	1	2014647-013	WIRE PER 1010707-1, RED JKT, 29AWG, RED, WHT, BLU, 15 FT TOTAL LG.
9	45	6	1010862	BUSHING, SLEEVE
9	46	6	1010763- 2	SOLDER, SLEEVE
	47	1	2014647-014	WIRE PER 1010789-12, 24AWG, YEL, RED, YEL, JKT, 16 FT TOT LG.

SIZE	CODE IDENT NO.		
A	80230	2014647	
SCALE-NONE	REV LTR L	SHEET 8 OF 31	

LEAD IDENT	WIRE MATL ITEM	LEAD LG	CIRCUIT PT FROM (A) TO (B)	TERM. AREA NO.	JKT STRIP LG	SHLD STRIP LG	LEAD CUT LG	INS STRIP LG	TIN	NOTE ONE, FIG	ACCESSORY ITEMS	REMARKS
G	1	5										
G	1R		P21-51 P29-H5					.13 .18	NO NO		18 21	BRANCH 1
G	1Y		P21-29 P29-K5					.13 .18	NO NO		18 21	BRANCH 1
G	2	5										
G	2R		P21-53 P29-K3					.13 .18	NO NO		18 21	BRANCH 1
G	2Y		P21-52 P29-K4					.13 .18	NO NO		18 21	BRANCH 1
G	3	5										
G	3R		P21-28 P29-K7					.13 .18	NO NO		18 21	BRANCH 1
G	3Y		P21-49 P29-K6					.13 .18	NO NO		18 21	BRANCH 1
G	6	5										
G	6R		P21-3 P29-G11					.13 .18	NO NO		18 21	BRANCH 1
G	6Y		P21-10 P29-H11					.13 .18	NO NO		18 21	BRANCH 1

SIZE	CODE IDENT NO.		
A	80230	2014647	
SCALE-NONE	REV LTR K	SHEET 9 OF 31	

LEAD IDENT	WIRE MATL ITEM	LEAD LG	CIRCUIT PT FROM (A) TO (B)	TERM.JKT AREA NO.	TERM.JKT STRIP LG	SHLD STRIP LG	LEAD CUT LG	INS STRIP LG	TIN	NOTE ONE, FIG	ACCESSORY ITEMS	REMARKS
G 7	10				1.75 1.00	1.50 .75				7 6B	36 25	
G 7B	11		P29-F2 SHLD G7					.18 .20	NO NO		20	BRANCH 1
G 7R			P21-39 P29-G2					.13 .18	NO NO		18 21	 BRANCH 1
G 7Y			P21-38 P29-H2					.13 .18	NO NO		18 21	 BRANCH 1
G 8	10				1.75 1.00	1.50 .75				7 6B	36 25	
G 8B	11		P29-F1 SHLD G8					.18 .20	NO NO		20	BRANCH 1
G 8R			P21-37 P29-G1					.13 .18	NO NO		18 21	 BRANCH 1
G 8Y			P21-61 P29-H1					.13 .18	NO NO		18 21	 BRANCH 1
G 9			DELETED									
G 9B			DELETED									
G 9R			DELETED									
G 9Y			DELETED									

SIZE	CODE IDENT NO.	
A	80230	2014647
SCALE-NONE	REV LTR K	SHEET 10 OF 31

MIL 2084 9-65

LEAD IDENT	WIRE MATL ITEM	LEAD LG	CIRCUIT PT FROM (A) TO (B)	TERM.JKT AREA NO.	TERM.JKT STRIP LG	SHLD STRIP LG	LEAD CUT LG	INS STRIP LG	TIN	NOTE ONE, FIG	ACCESSORY ITEMS	REMARKS
G 10			DELETED									
G 10B			DELETED									
G 10R			DELETED									
G 10Y			DELETED									
G 11	10				1.75 1.00	1.50 .75				7 6B	36 25	
G 11B	11		P29-C6 SHLD G11					.18 .20	NO NO		20	BRANCH 1
G 11R			P21-17 P29-B6					.13 .18	NO NO		18 21	 BRANCH 1
G 11Y			P21-16 P29-A6					.13 .18	NO NO		18 21	 BRANCH 1
G 12	10				1.75 1.00	1.50 .75				7 6B	36 25	
G 12B	11		P29-D2 SHLD G12					.18 .20	NO NO		20	BRANCH 1
G 12R			P21-59 P29-C2					.13 .18	NO NO		18 21	 BRANCH 1
G 12Y			P21-36 P29-B2					.13 .18	NO NO		18 21	 BRANCH 1

SIZE	CODE IDENT NO.	
A	80230	2014647
SCALE-NONE	REV LTR K	SHEET 11 OF 31

MIL 2084 9-65

LEAD IDENT	WIRE MATL ITEM	LEAD LG	CIRCUIT PT FROM (A) TO (B)	TERM.JKT AREA NO.	TERM.JKT STRIP LG	SHLD STRIP LG	LEAD CUT LG	INS STRIP LG	TIN	NOTE ONE, FIG	ACCESSORY ITEMS	REMARKS
G 13	10				1.75 1.00	1.50 .75				7 6B	36 25	
G 13B	11		P29-D1 SHLD G13					.18 .20	NO NO		20	BRANCH 1
G 13R			P21-57 P29-B1					.13 .18	NO NO		18 21	 BRANCH 1
G 13Y			P21-58 P29-C1					.13 .18	NO NO		18 21	 BRANCH 1
G 14	5											
G 14R			P21-42 P29-K9					.13 .18	NO NO		18 21	 BRANCH 1
G 14Y			P21-43 P29-H9					.13 .18	NO NO		18 21	 BRANCH 1
G 15	5											
G 15R			P21-24 P29-G9					.13 .18	NO NO		18 21	 BRANCH 1
G 15Y			P21-44 P29-G10					.13 .18	NO NO		18 21	 BRANCH 1
G 16	5											
G 16R			P21-46 P29-H10					.13 .18	NO NO		18 21	 BRANCH 1

SIZE	CODE IDENT NO.	
A	80230	2014647
SCALE NONE	REV LTR K	SHEET 12 OF 31

MIL 2084 9-65

LEAD IDENT	WIRE MATL ITEM	LEAD LG	CIRCUIT PT FROM (A) TO (B)	TERM.JKT AREA NO.	TERM.JKT STRIP LG	SHLD STRIP LG	LEAD CUT LG	INS STRIP LG	TIN	NOTE ONE, FIG	ACCESSORY ITEMS	REMARKS
G 16Y			P21-25 P29-K10					.13 .18	NO NO		18 21	 BRANCH 1
G 17	8											
G 17G			P21-26 P29-G12					.13 .18	NO NO		18 21	 BRANCH 2
G 17R			P21-12 P29-H12					.13 .18	NO NO		18 21	 BRANCH 2
G 17Y			P21-27 P29-H13					.13 .18	NO NO		18 21	 BRANCH 2
G 18	5											
G 18R			P20-7 P29-K23					.13 .18	NO NO		18 21	 BRANCH 2
G 18Y			P20-8 P29-K22					.13 .18	NO NO		18 21	 BRANCH 2
G 19			DELETED									
G 19K			DELETED									
G 19Y			DELETED									
G 20			DELETED									

SIZE	CODE IDENT NO.	
A	80230	2014647
SCALE-NONE	REV LTR L	SHEET 13 OF 31

MIL 2084 9-65

LEAD IDENT	WIRE MATL ITEM	LEAD LG	CIRCUIT PT FROM (A) TO (B)	TERM.JKT AREA NO.	STRIP LG	SHLD STRIP LG	LEAD CUT LG	INS STRIP LG	TIN	NOTE ONE, FIG	ACCESSORY ITEMS	REMARKS
G 20R			DELETED									
G 20Y			DELETED									
G 21			DELETED									
G 21R			DELETED									
G 21Y			DELETED									
G 22	4											
G 22R			P20-5					.13	NO		18	
			P29-C23					.18	NO		20	BRANCH 2
G 22Y			P20-4					.13	NO		18	
			P29-C24					.18	NO		20	BRANCH 2
G 23	7											
G 23G			P20-30					.13	NO		18	
			P29-B25					.18	NO		20	BRANCH 2
G 23R			P20-15					.13	NO		18	
			P29-C25					.18	NO		20	BRANCH 2
G 23Y			P20-14					.13	NO		18	
			P29-B24					.18	NO		20	BRANCH 2

SIZE	CODE IDENT NO.	
A	80230	2014647
SCALE-NONE	REV LTR K	SHEET 14 OF 31

LEAD IDENT	WIRE MATL ITEM	LEAD LG	CIRCUIT PT FROM (A) TO (B)	TERM.JKT AREA NO.	STRIP LG	SHLD STRIP LG	LEAD CUT LG	INS STRIP LG	TIN	NOTE ONE, FIG	ACCESSORY ITEMS	REMARKS
G 24	5											
G 24R			P20-46					.13	NO		18	
			P29-A23					.18	NO		21	BRANCH 2
G 24Y			P20-71					.13	NO		18	
			P29-B23					.18	NO		21	BRANCH 2
G 25	5											
G 25R			P20-73					.13	NO		18	
			P. 9-B22					.18	NO		21	BRANCH 2
G 25Y			P20-72					.13	NO		18	
			P29-A22					.18	NO		21	BRANCH 2
G 26	5											
G 26R			P20-28					.13	NO		18	
			P29-A21					.18	NO		21	BRANCH 2
G 26Y			P20-48					.13	NO		18	
			P29-B21					.18	NO		21	BRANCH 2
G 27	10				1.75	1.50				7	36	
					1.00	.75				6B	25	
G 27B	11		P29-C9					.18	NO		20	BRANCH 1
			SHLD G27					.20	NO			
G 27R			P20-80					.13	NO		18	
			P29-A9					.18	NO		21	BRANCH 1

SIZE	CODE IDENT NO.	
A	80230	2014647
SCALE-NONE	REV LTR K	SHEET 15 OF 31

LEAD IDENT	WIRE MATL ITEM	LEAD LG	CIRCUIT PT FROM (A) TO (B)	TERM.JKT AREA NO.	STRIP LG	SHLD STRIP LG	LEAD CUT LG	INS STRIP LG	TIN	NOTE ONE, FIG	ACCESSORY ITEMS	REMARKS
G 27Y			P20-81					.13	NO		18	
			P29-B9					.18	NO		21	BRANCH 1
G 28	10				1.75	1.50				7	36	
					1.00	.75				6B	25	
G 28B	11		P29-C10					.18	NO		20	BRANCH 1
			SHLD G28					.20	NO			
G 28R			P20-57					.13	NO		18	
			P29-B10					.18	NO		21	BRANCH 1
G 28Y			P20-82					.13	NO		18	
			P29-A10					.18	NO		21	BRANCH 1
G 29	10				1.75	1.50				7	36	
					1.00	.75				6B	25	
G 29B	11		P29-D11					.18	NO		20	BRANCH 1
			SHLD G29					.20	NO			
G 29R			P20-65					.13	NO		18	
			P29-B11					.18	NO		21	BRANCH 1
G 29Y			P20-61					.13	NO		18	
			P29-C11					.18	NO		21	BRANCH 1
G 30	10				1.75	1.50				7	36	
					1.00	.75				6B	25	
G 30B	11		P29-D12					.18	NO		20	BRANCH 2
			SHLD G30					.20	NO			
G 30R			P20-83					.13	NO		18	
			P29-C12					.18	NO		21	BRANCH 2

SIZE	CODE IDENT NO.	
A	80230	2014647
SCALE-NONE	REV LTR K	SHEET 16 OF 31

LEAD IDENT	WIRE MATL ITEM	LEAD LG	CIRCUIT PT FROM (A) TO (B)	TERM.JKT AREA NO.	STRIP LG	SHLD STRIP LG	LEAD CUT LG	INS STRIP LG	TIN	NOTE ONE, FIG	ACCESSORY ITEMS	REMARKS
G 30Y			P20-84					.13	NO		18	
			P29-B12					.18	NO		21	BRANCH 2
G 31	10				1.75	1.50				7	36	
					1.00	.75				6B	25	
G 31B	11		P29-D13					.18	NO		20	BRANCH 2
			SHLD G31					.20	NO			
G 31R			P20-59					.13	NO		18	
			P29-B13					.18	NO		21	BRANCH 2
G 31Y			P20-35					.13	NO		18	
			P29-C13					.18	NO		21	BRANCH 2
G 32	10				1.75	1.50				7	36	
					1.00	.75				6B	25	
G 32B	11		P29-D14					.18	NO		20	BRANCH 2
			SHLD G32					.20	NO			
G 32R			P20-34					.13	NO		18	
			P29-C14					.18	NO		21	BRANCH 2
G 32Y			P20-33					.13	NO		18	
			P29-B14					.18	NO		21	BRANCH 2
G 33	9											
G 33G			P20-22					.13	NO		18	
			P29-B15					.18	NO		21	BRANCH 2
G 33N			P20-40					.13	NO		18	
			P29-C15					.18	NO		21	BRANCH 2

SIZE	CODE IDENT NO.	
A	80230	2014647
SCALE-NONE	REV LTR K	SHEET 17 OF 31

LEAD IDENT	WIRE MATL ITEM	LEAD LG	CIRCUIT PT FROM (A) TO (B)	TERM.JKT AREA NO.	STRIP LG	SHLD STRIP LG	LEAD CUT LG	INS STRIP LG	TIN	NOTE ONE, FIG	ACCESSORY ITEMS	REMARKS
G 33R			P20-04					.13	NO		18	
			P29-C16					.18	NO		21	BRANCH 2
G 33Y			P20-39					.13	NO		18	
			P29-B16					.18	NO		21	BRANCH 2
G 35	6											
G 35G			P20-43					.13	NO		18	
			P29-C19					.18	NO		20	BRANCH 2
G 35R			P20-68					.13	NO		18	
			P29-C18					.18	NO		20	BRANCH 2
G 35Y			P20-69					.13	NO		18	
			P29-D18					.18	NO		20	BRANCH 2
G 36	3											
G 36R			P20-66					.13	NO		18	
			P29-A20					.18	NO		20	BRANCH 2
G 36Y			P20-42					.13	NO		18	
			P29-B20					.18	NO		20	BRANCH 2
G 37	5											
G 37R			P20-74					.13	NO		18	
			P29-C22					.18	NO		21	BRANCH 2
G 37Y			P20-75					.13	NO		18	
			P29-C21					.18	NO		21	BRANCH 2

LEAD IDENT	WIRE MATL ITEM	LEAD LG	CIRCUIT PT FROM (A) TO (B)	TERM.JKT AREA NO.	STRIP LG	SHLD STRIP LG	LEAD CUT LG	INS STRIP LG	TIN	NOTE ONE, FIG	ACCESSORY ITEMS	REMARKS
G 36	10				1.75	1.50				7	36	
					1.00	.75				6B	25	
G 38B	11		P29-G17					.18	NO		20	BRANCH 2
			SHLD G38					.20	NO			
G 38R			P20-79					.13	NO		18	
			P29-G15					.18	NO		21	BRANCH 2
G 38Y			P20-78					.13	NO		18	
			P29-G16					.18	NO		21	BRANCH 2
G 39	10				1.75	1.50				7	36	
					1.00	.75				6B	25	
G 39B	11		P29-H17					.18	NO		20	BRANCH 2
			SHLD G39					.20	NO			
G 39R			P20-54					.13	NO		18	
			P29-H16					.18	NO		21	BRANCH 2
G 39Y			P20-31					.13	NO		18	
			P29-H15					.18	NO		21	BRANCH 2
G 40	2		P22-1					.13	NO		17	A
			P32-1					.13	NO		18	
G 41	2		P22-5					.13	NO		17	A
			P32-5					.13	NO		18	
G 42	2		P22-6					.13	NO		17	A
			P32-6					.13	NO		18	
G 43	2		P22-16					.13	NO		17	A
			P32-16					.13	NO		18	

LEAD IDENT	WIRE MATL ITEM	LEAD LG	CIRCUIT PT FROM (A) TO (B)	TERM.JKT AREA NO.	STRIP LG	SHLD STRIP LG	LEAD CUT LG	INS STRIP LG	TIN	NOTE ONE, FIG	ACCESSORY ITEMS	REMARKS
G 44	2		P22-17					.13	NO		17	A
			P32-17					.13	NO		18	
G 45	2		P22-18					.13	NO		17	A
			P32-18					.13	NO		18	
G 46	2		P22-19					.13	NO		17	A
			P32-19					.13	NO		18	
G 47	2		P22-7					.13	NO		17	A
			P32-7					.13	NO		18	
G 48	2		P22-8					.13	NO		17	A
			P32-8					.13	NO		18	
G 49	2		P22-20					.13	NO		17	A
			P32-20					.13	NO		18	
G 50	2		P22-2					.13	NO		17	A
			P32-2					.13	NO		18	
G 51	2		P22-9					.13	NO		17	A
			P32-9					.13	NO		18	
G 52	2		P22-21					.13	NO		17	A
			P32-21					.13	NO		18	
G 53	2		P22-22					.13	NO		17	A
			P32-22					.13	NO		18	
G 54	2		P22-23					.13	NO		17	A
			P32-23					.13	NO		18	
G 55	2		P22-10					.13	NO		17	A
			P32-10					.13	NO		18	

LEAD IDENT	WIRE MATL ITEM	LEAD LG	CIRCUIT PT FROM (A) TO (B)	TERM.JKT AREA NO.	STRIP LG	SHLD STRIP LG	LEAD CUT LG	INS STRIP LG	TIN	NOTE ONE, FIG	ACCESSORY ITEMS	REMARKS
G 56	2		P22-24					.13	NO		17	A
			P32-24					.13	NO		18	
G 57	2		P22-3					.13	NO		17	A
			P32-3					.13	NO		18	
G 58	2		P22-11					.13	NO		17	A
			P32-11					.13	NO		18	
G 59	2		P22-79					.13	NO		17	A
			P32-79					.13	NO		18	
G 60	2		P22-13					.13	NO		17	A
			P32-13					.13	NO		18	
G 61	2		P22-33					.13	NO		17	A
			P32-33					.13	NO		18	
G 62	2		P22-4					.13	NO		17	A
			P32-4					.13	NO		18	
G 63	2		P22-12					.13	NO		17	A
			P32-12					.13	NO		18	
G 64	2		P22-74					.13	NO		17	A
			P32-74					.13	NO		18	
G 65	2		P22-14					.13	NO		17	A
			P32-14					.13	NO		18	
G 66	2		P22-29					.13	NO		17	A
			P32-29					.13	NO		18	
G 67	2		P22-30					.13	NO		17	A
			P32-30					.13	NO		18	

LEAD IDENT	WIRE MATL ITEM	LEAD LG	CIRCUIT PT FROM (A) TO (B)	TERM.JKT AREA NO.	STRIP LG	SHLD STRIP LG	LEAD CUT LG	INS STRIP LG	TIN	NOTE ONE, FIG	ACCESSORY ITEMS	REMARKS
G 68	2		P22-15					.13	NO		17	A
			P32-15					.13	NO		18	
G 69	2		P22-28					.13	NO		17	A
			P32-28					.13	NO		18	
G 70	2		P22-50					.13	NO		17	A
			P32-50					.13	NO		18	
G 71	2		P22-51					.13	NO		17	A
			P32-51					.13	NO		18	
G 72	2		P22-76					.13	NO		17	A
			P32-76					.13	NO		18	
G 73	2		P22-75					.13	NO		17	A
			P32-75					.13	NO		18	
G 74	2		P22-49					.13	NO		17	A
			P32-49					.13	NO		18	
G 75	2		P22-55					.13	NO		17	A
			P32-55					.13	NO		18	
G 76	2		P22-56					.13	NO		17	A
			P32-56					.13	NO		18	
G 77	2		P22-43					.13	NO		17	A
			P32-43					.13	NO		18	
G 78	2		P22-44					.13	NO		17	A
			P32-44					.13	NO		18	
G 79	2		P22-54					.13	NO		17	A
			P32-54					.13	NO		18	

SIZE	CODE IDENT NO.	
A	80230	2014647
SCALE-NONE	REV LTR K	SHEET 22 OF 81

LEAD IDENT	WIRE MATL ITEM	LEAD LG	CIRCUIT PT FROM (A) TO (B)	TERM.JKT AREA NO.	STRIP LG	SHLD STRIP LG	LEAD CUT LG	INS STRIP LG	TIN	NOTE ONE, FIG	ACCESSORY ITEMS	REMARKS
G 80	2		P22-59					.13	NO		17	A
			P32-59					.13	NO		18	
G 81	2		P22-34					.13	NO		17	A
			P32-34					.13	NO		18	
G 82	2		P22-83					.13	NO		17	A
			P32-83					.13	NO		18	
G 83	2		P22-57					.13	NO		17	A
			P32-57					.13	NO		18	
G 84	2		P22-58					.13	NO		17	A
			P32-58					.13	NO		18	
G 85	2		P22-39					.13	NO		17	A
			P32-39					.13	NO		18	
G 86	2		P22-35					.13	NO		17	A
			P32-35					.13	NO		18	
G 87	2		P22-64					.13	NO		17	A
			P32-64					.13	NO		18	
G 88	2		P22-65					.13	NO		17	A
			P32-65					.13	NO		18	
G 89	2		P22-40					.13	NO		17	A
			P32-40					.13	NO		18	
G 90	2		P22-32					.13	NO		17	A
			P32-32					.13	NO		18	
G 91	2		P22-31					.13	NO		17	A
			P32-31					.13	NO		18	

SIZE	CODE IDENT NO.	
A	80230	2014647
SCALE-NONE	REV LTR K	SHEET 23 OF 81

LEAD IDENT	WIRE MATL ITEM	LEAD LG	CIRCUIT PT FROM (A) TO (B)	TERM.JKT AREA NO.	STRIP LG	SHLD STRIP LG	LEAD CUT LG	INS STRIP LG	TIN	NOTE ONE, FIG	ACCESSORY ITEMS	REMARKS
G 92	2		P22-78					.13	NO		17	A
			P32-78					.13	NO		18	
G 93	2		P22-42					.13	NO		17	A
			P32-42					.13	NO		18	
G 94	2		P22-41					.13	NO		17	A
			P32-41					.13	NO		18	
G 95	2		P22-38					.13	NO		17	A
			P32-38					.13	NO		18	
G 96	5											
G 96R			P20-26					.13	NO		18	
			P29-K18					.18	NO		21	BRANCH 2
G 96Y			P20-47					.13	NO		18	
			P29-H18					.18	NO		21	BRANCH 2
G 97	5											
G 97R			P20-13					.13	NO		18	
			P29-H19					.18	NO		21	BRANCH 2
G 97Y			P20-27					.13	NO		18	
			P29-K19					.18	NO		21	BRANCH 2
G 96	5											
G 98R			P20-51					.13	NO		18	
			P29-K20					.18	NO		21	BRANCH 2

SIZE	CODE IDENT NO.	
A	80230	2014647
SCALE-NONE	REV LTR K	SHEET 24 OF 81

LEAD IDENT	WIRE MATL ITEM	LEAD LG	CIRCUIT PT FROM (A) TO (B)	TERM.JKT AREA NO.	STRIP LG	SHLD STRIP LG	LEAD CUT LG	INS STRIP LG	TIN	NOTE ONE, FIG	ACCESSORY ITEMS	REMARKS
G 98Y			P20-29					.13	NO		18	
			P29-H20					.18	NO		21	BRANCH 2
G 99	1		P20-62					.13	NO		18	
			P29-D19					.18	NO		20	BRANCH 2
G 100	2		P22-60					.13	NO		17	A
			P32-60					.13	NO		18	
G 101	2		P22-36					.13	NO		17	A
			P32-36					.13	NO		18	
G 102	2		P22-37					.13	NO		17	A
			P32-37					.13	NO		18	
G 103	2		P22-61					.13	NO		17	A
			P32-61					.13	NO		18	
G 104	2		P22-69					.13	NO		17	A
			P32-69					.13	NO		18	
G 105	2		P22-68					.13	NO		17	A
			P32-68					.13	NO		18	
G 106	2		P22-67					.13	NO		17	A
			P32-67					.13	NO		18	
G 107	2		P22-66					.13	NO		17	A
			P32-66					.13	NO		18	
G 112	5											
G 112R			P21-41					.13	NO		18	
			P29-A3					.18	NO		21	BRANCH 1

SIZE	CODE IDENT NO.	
A	80230	2014647
SCALE-NONE	REV LTR K	SHEET 25 OF 81

LEAD IDENT	WIRE MATL ITEM	LEAD LG	CIRCUIT PT FROM (A) TO (B)	TERM.JKT AREA NO.	TERM.JKT STRIP LG	SHLD STRIP LG	LEAD CUT LG	INS STRIP LG	TIN	NOTE ONE, FIG	ACCESSORY ITEMS	REMARKS
G 112Y			P21-22					.13	NO		18	
			P29-B3					.18	NO		21	BRANCH 1
G 113	2		P20-12					.13	NO		18	
			P29-K21					.18	NO		21	BRANCH 2
G 114	2		P20-77					.13	NO		18	
			P29-D21					.18	NO		21	BRANCH 2
G 115			DELETED									
G 115R			DELETED									
G 115Y			DELETED									
G 116			DELETED									
G 116R			DELETED									
G 116Y			DELETED									
G 117	2		P22-77					.13	NO		17	A
			P32-77					.13	NO		18	
G 118	2		P22-52					.13	NO		17	A
			P32-52					.13	NO		18	
G 119	2		P21-55					.13	NO		18	
			P29-A5					.18	NO		21	BRANCH 1

SIZE	CODE IDENT NO.	
A	80230	2014647
SCALE-NONE	REV LTR K	SHEET 26 OF 31

LEAD IDENT	WIRE MATL ITEM	LEAD LG	CIRCUIT PT FROM (A) TO (B)	TERM.JKT AREA NO.	TERM.JKT STRIP LG	SHLD STRIP LG	LEAD CUT LG	INS STRIP LG	TIN	NOTE ONE, FIG	ACCESSORY ITEMS	REMARKS
G 120	38		E35					.19	NO		37	A
			P32-81					.13	NO		18	
G 130	2		P20-67					.13	NO		18	
			P29-D25					.18	NO		21	
G 131	10				1.75	1.50				6B	25	
					1.75	1.50				6B	25	
G 131A	11		SHLD G131					.20	NO			
			P22-46					.13	NO		17	
G 131B	11		P32-46					.13	NO		18	
			SHLD G131					.20	NO			
G 131R			P22-45					.13	NO		17	
			P32-45					.13	NO		18	
G 131Y			P22-25					.13	NO		17	
			P32-25					.13	NO		18	
G 132	10				1.75	1.50				6B	25	
					1.75	1.50				6B	25	
G 132A	11		SHLD G132					.20	NO			
			P22-72					.13	NO		17	
G 132B	11		P32-72					.13	NO		18	
			SHLD G132					.20	NO			
G 132R			P22-70					.13	NO		17	
			P32-70					.13	NO		18	
G 132Y			P22-71					.13	NO		17	
			P32-71					.13	NO		18	

SIZE	CODE IDENT NO.	
A	80230	2014647
SCALE-NONE	REV LTR K	SHEET 27 OF 31

LEAD IDENT	WIRE MATL ITEM	LEAD LG	CIRCUIT PT FROM (A) TO (B)	TERM.JKT AREA NO.	TERM.JKT STRIP LG	SHLD STRIP LG	LEAD CUT LG	INS STRIP LG	TIN	NOTE ONE, FIG	ACCESSORY ITEMS	REMARKS
G 133	10				1.75	1.50				6B	25	
					1.75	1.50				6B	25	
G 133A	11		SHLD G133					.20	NO			
			P22-27					.13	NO		17	
G 133B	11		P32-27					.13	NO		18	
			SHLD G133					.20	NO			
G 133R			P22-47					.13	NO		17	
			P32-47					.13	NO		18	
G 133Y			P22-26					.13	NO		17	
			P32-26					.13	NO		18	
G 134	44				1.75	1.50				68	46	
					1.00	.75				68	46	
G 134A	11		SHLD G134					.20	NO			
			P20-9					.13	NO		18	
G 134B	11		P29-F23					.18	NO		20	BRANCH 2
			SHLD G134					.20	NO			
G 134L			NONE				1.75		NO			
			NONE				1.00		NO			
G 134R			P20-23					.13	NO		18, 45	
			P29-F25					.18	NO		21	BRANCH 2
G 134W			P20-24					.13	NO		18, 45	
			P29-F24					.18	NO		21	BRANCH 2
G 135	44				1.75	1.50				68	46	
					1.00	.75				68	46	

SIZE	CODE IDENT NO.	
A	80230	2014647
SCALE-NONE	REV LTR K	SHEET 28 OF 31

LEAD IDENT	WIRE MATL ITEM	LEAD LG	CIRCUIT PT FROM (A) TO (B)	TERM.JKT AREA NO.	TERM.JKT STRIP LG	SHLD STRIP LG	LEAD CUT LG	INS STRIP LG	TIN	NOTE ONE, FIG	ACCESSORY ITEMS	REMARKS
G 135A	11		SHLD G135					.20	NO			
			P20-10					.13	NO		18	
G 135B	11		P29-G23					.18	NO		20	BRANCH 2
			SHLD G135					.20	NO			
G 135L			NONE				1.75		NO			
			NONE				1.00		NO			
G 135R			P20-3					.13	NO		18, 45	
			P29-G24					.18	NO		21	BRANCH 2
G 135W			P20-11					.13	NO		18, 45	
			P29-G25					.18	NO		21	BRANCH 2
G 136	44				1.75	1.50				68	46	
					1.00	.75				68	46	
G 136A	11		SHLD G136					.20	NO			
			P20-45					.13	NO		18	
G 136B	11		P29-H23					.18	NO		20	BRANCH 2
			SHLD G136					.20	NO			
G 136L			NONE				1.75		NO			
			NONE				1.50		NO			
G 136R			P20-25					.13	NO		18, 45	
			P29-H25					.18	NO		21	BRANCH 2
G 136W			P20-44					.13	NO		18, 45	
			P29-H24					.18	NO		21	BRANCH 2
G 137	10				1.75	1.50				7	36	
					1.00	.75				7	36	

SIZE	CODE IDENT NO.	
A	80230	2014647
SCALE-NONE	REV LTR K	SHEET 29 OF 31

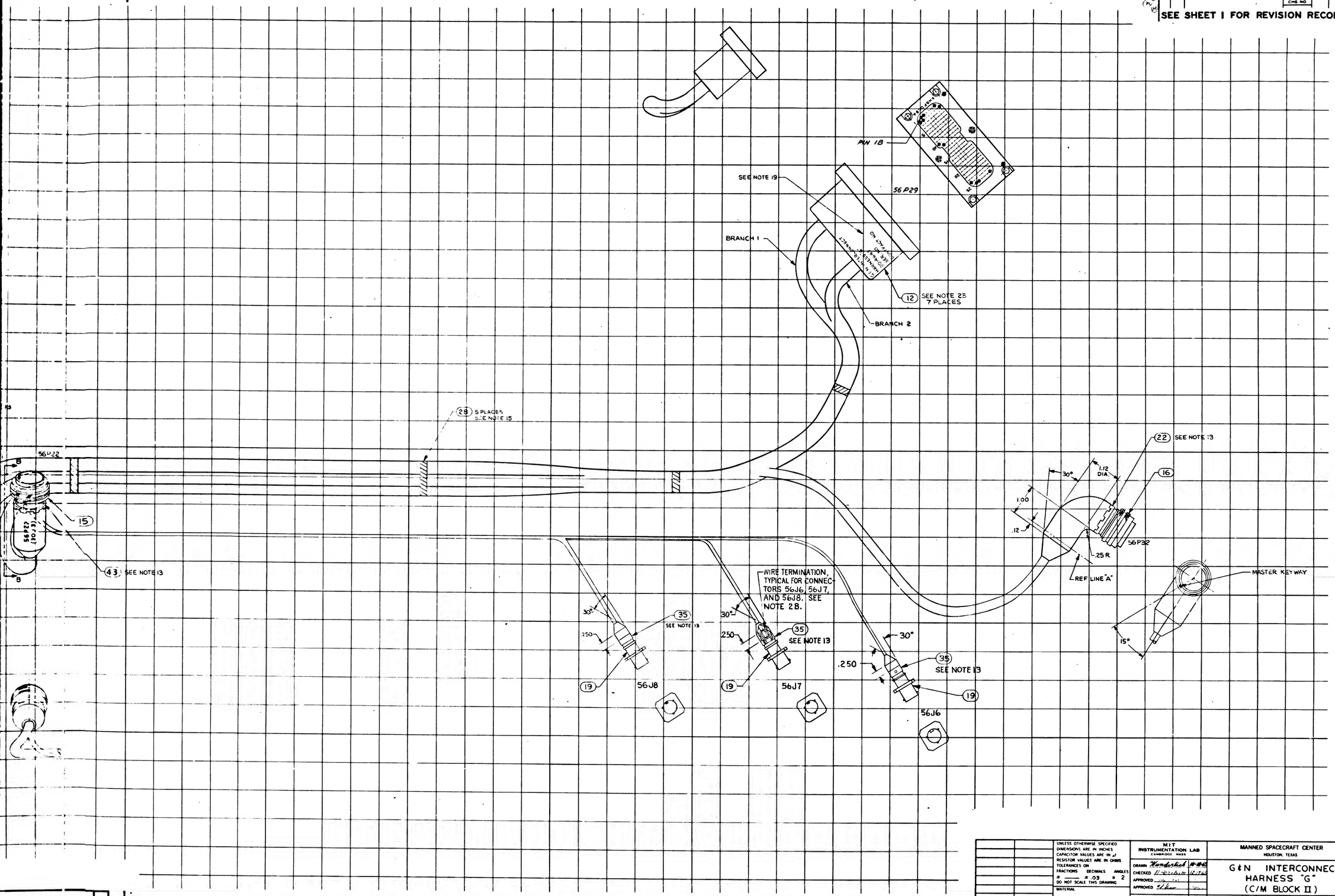
LEAD IDENT	WIRE MATL ITEM	LEAD LG	CIRCUIT PT FROM (A) TO (B)	TERM.JKT AREA NO.	STRIP LG	SHLD STRIP LG	LEAD CUT LG	INS STRIP LG	TIN	NOTE ONE. FIG	ACCESSORY ITEMS	REMARKS
G 137R			J7-7					.13	NO		18	
			P29-A18					.22	NO			BRANCH 2
G 137Y			J7-4					.13	NO		18	
			P29-B18					.22	NO			BRANCH 2
G 138	10				1.75	1.50				7	36	
					1.00	.75				7	36	
G 138R			J8-7					.13	NO		18	
			P29-A18					.22	NO		20	BRANCH 2
G 138Y			J8-4					.13	NO		18	
			P29-B18					.22	NO		20	BRANCH 2
G 139	47				1.75	1.50				7	36	
					1.00	.75				7	36	
G 139R			J6-7					.13	NO		18	
			P29-A19					.18	NO		20	BRANCH 2
G 139Y			J6-4					.13	NO		18	
			P29-B19					.18	NO		20	BRANCH 2

SIZE	CODE IDENT NO.	
A	80230	2014647
SCALE-NONE	REV LTR K	SHEET 30 OF 31

MIL 2084 9-65

REVISIONS				
SYM	ZONE	DESCRIPTION / CHG NO	DATE	APPD

SEE SHEET 1 FOR REVISION RECORD

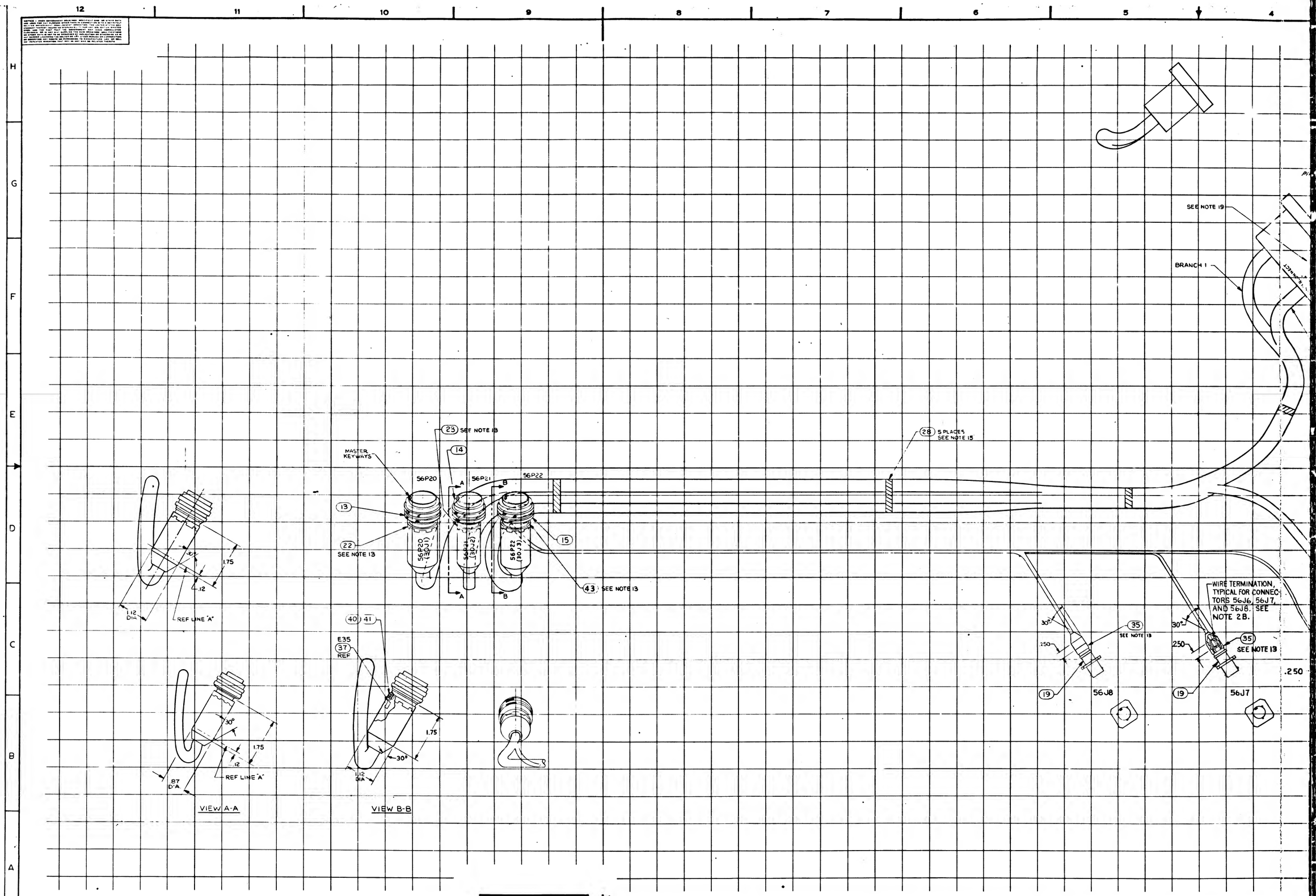


NEXT ASSY	USED ON	UNLESS OTHERWISE SPECIFIED DIMENSIONS ARE IN INCHES CAPACITOR VALUES ARE IN µf RESISTOR VALUES ARE IN OHMS TOLERANCES ON FRACTIONS ± DECIMALS ± .03 ANGLES ± 2 DO NOT SCALE THIS DRAWING MATERIAL	MIT INSTRUMENTATION LAB CAMBRIDGE MASS. DRAWN Wunderlich CHECKED APPROVED APPROVED	MANNED SPACECRAFT CENTER HOUSTON, TEXAS G&N INTERCONNECT HARNESS "G" (C/M BLOCK II)
APPLICATION			APPROVED MIT APPROVED MSC DATE	CODE IDENT NO 80230 SIZE J DRAWING NO 2014647 SCALE FULL SHEET 1 OF 1

2014647 L

2014647

2014647



2014647 L

1/2014647

2014648

NOTE:

1. INTERPRET DRAWING IN ACCORDANCE WITH STANDARDS PRESCRIBED BY MIL-D-70327.
2. VENDOR ITEM - SEE SPECIFICATION CONTROL DRAWING.
3. SELECT AS REQUIRED.
4. DRAWING FOR REFERENCE ONLY.

REVISIONS

SYM	ZONE	DESCRIPTION	CHG NO.	DATE	APPD.
C		INITIAL CLASS A RELEASE TDRR 22050			

ITEM NO.	NO. REQD	P/N	DESCRIPTION
	4		CLAMP, PSA CONNECTOR 5052-H32-AL PER QQ-A-250/8, 2"LG x 1/2"WD x 1/16" THK
	2		COVER, PSA CONNECTOR 5052-H32-AL PER QQ-A-250/8, 6"LG x 3"WD x 1/32 THK
	1		CONNECTOR, PSA (P27) 6061-T6-AL PER QQ-A-250/11, 4"LG x 2"WD x 1/2" THK
	X	2014678	INTERCONNECT LIST

SEE NOTE 4

ITEM NO.	NO. REQD	PART OR IDENTIFYING NUMBER	NOMENCLATURE OR DESCRIPTION
	12	1010264-25	CAPACITOR, 0.1uf (SEE NOTE 2)
	2	6008007	SCREW, CAPTIVE
	8	MS21209-C0415	INSERT, SCREW THREAD, SELF LOCKING
	AR	1010989	TAPE, SHIELDING, EMI/RFI
	2		CLAMP, CONNECTOR
	2	1010981-30 THRU 1010981-1	GROMMET (SEE NOTE 3)
	AR	1012507-4	TAPE, LACING (SEE NOTE 2 & 3)
	AR	1012507-2	TAPE, LACING (SEE NOTE 2 & 3)
	AR	1010661	EPOXY, RESIN (SEE NOTE 2)
	AR	1010679	ADHESIVE ACTUATOR (SEE NOTE 2)
	AR	1012503	COMPOUND, POTTING, POLYURETHANE (SEE NOTE 2)
	2		ADAPTER, POTTING MOLD
	AR	MIL-T-23594	TAPE, TEFLON
	4	1010705-8	CLAMP
	3	1010400-1	CLAMP, CABLE (SEE NOTE 2)
	10	1010983-1	PLUG, PROTECTIVE SEALING
	40	1010958-1	PLUG, PROTECTIVE SEALING
	42	1010956-1	INSULATOR, MALE
	42	1010955-1	CONTACT, MALE
	170	1010770-2	CONTACT, SOCKET (SEE NOTE 2)
	36	1010932-2	CONTACT, PIN
	1	1010930-003	CONNECTOR, RECEPTACLE (J5)
	1	1010929-003	CONNECTOR, PLUG (P25)
	1	1010921-2	CONNECTOR, PLUG (P31)
	1	1010921-1	CONNECTOR, PLUG (P30)

LIST OF PARTS AND MATERIALS

2014567-011	2014567-011
NEXT ASSY	USED ON
APPLICATION	

UNLESS OTHERWISE SPECIFIED
DIMENSIONS ARE IN INCHES
TOLERANCES ON
FRACTIONS + — — DECIMALS + — — ANGLES + — —
DO NOT SCALE THIS DRAWING
MATERIAL —
CONTRACT

MIT INSTRUMENTATION LAB
CAMBRIDGE, MASS.
DWG. NO. CONTRACT
DRAWN E LITZOW 27 MAY 65 DATE
CHECKED FESLER 28 MAY 65
APPROVAL R C Watson 8-24-65
APPROVAL J J Kenne 8/23/65
NASA APPROVAL 8/24/65
MIT APPROVAL 31 Aug 65

MANNED SPACECRAFT CENTER
HOUSTON, TEXAS

G&N INTERCONNECT HARNESS "H"

CODE IDENT NO. 80230 | SIZE C | 2014648
SCALE — | SHEET 1 OF 1

MIL 1077C-P

REVISIONS			
SYM	DESCRIPTION	DATE	APPROVAL
F	REPLACES REV(E) WITH CHANGE PER TDRR		
G	CHANGED PER TDRR 24813		

APPLICATION

NEXT ASSY	USED ON

REPLACES REV E WITH CHANGE

REV	F	G	F	G	F	F																	
SHEET	21	22	23	24	25	26	27	28															
REV STATUS	REV						F	F	G	G	F	G	G	F	F	F	F	F	G	G	F	F	F
OF SHEETS	SHEET						1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16	17	18	19	20

AC ELECTRONICS DIVISION
GENERAL MOTORS CORP. - MILWAUKEE WIS.

MANNED SPACECRAFT CENTER
HOUSTON, TEXAS

G & N INTERCONNECT HARNESS "H"
(C/M, BLOCK II)

DRAWN R. Roth 9 Dec. '65 DATE
CHECKED W. Diehl 9 Dec. '65
APPROVAL E. PETERSON 10 DEC. '65
APPROVAL [illegible] DEC 28 65

CODE IDENT NO. 80230 | SIZE A | 2014648 | REV G

NASA APPROVAL A. C. MELTZGER
MIT APPROVAL [illegible]
CONTRACT NAS9-497 | SCALE | SHEET 1 OF 28

NOTE NUMBER	GENERAL NOTES DESCRIPTION
1	SHIELD TERMINATION FIGURES ARE PER ND1002071 FOR FIGURE 6B AND ND 1002032 FOR FIGURE 7.
2	INTERPRET DRAWING IN ACCORDANCE WITH STANDARDS PRESCRIBED BY MIL-D-70327.
3	INTERCONNECT LIST FOR THIS HARNESS IS 2014678.
4	PARTIAL CIRCUIT POINTS ARE SHOWN. PREFIX WITH UNIT NUMBER 56 FOR COMPLETE CIRCUIT POINT
5	THE SUFFIX LETTER OF A CONDUCTOR IDENTIFICATION NUMBER IDENTIFIES A SHIELD LEAD, COLOR, OR MARKED LETTER. A - FROM END OF SHIELD B - TO END OF SHIELD G - GREEN K - BLACK L - BLUE N - BROWN R - RED W - WHITE Y - YELLOW
6	ASTERISK DENOTES LOWER CASE LETTER
7	GRID MODULE ON PICTURE SHEET IS 1 INCH TRUE POSITION
8	UNLESS OTHERWISE SPECIFIED FEATURE CENTERLINES ON PICTURE SHEET ARE LOCATED WITHIN + OR - .25. ENDS OF HOOKUP WIRES OR ACCESSORIES ARE LOCATED WITHIN .12.
9	VENDOR ITEM - SEE SOURCE CONTROL OR SPECIFICATION CONTROL DRAWING.
10	CRIMP CONTACTS PER ND1002032.

MIL 2084 9-65

NOTE NUMBER	GENERAL NOTES DESCRIPTION
11	ALL UNUSED ~~CONNECTOR HOLES~~ CONTACT CAVITIES SHALL BE FILLED WITH A CONTACT OR CONTACT AND SEALING PLUG AS FOLLOWS CONNECTOR 56~~P13~~P15 AND P~~16~~18 USE ITEM NUMBERS 19 AND 24. CONNECTOR 56P27, USE ITEM NUMBER 20. CONNECTOR 56P30, AND 31 USE ITEM NUMBERS 18 AND 23.
12	LACE HARNESS PER ND1002032 USING ITEM NUMBER 40.
13	A SMALL QUANTITY OF POTTING COMPOUND MUST BE PUT BETWEEN THE THREADED PORTION OF CONNECTOR AND SILICONE RUBBER GROMMET TO SEAL AND BOND RING TO CONNECTOR PRIOR TO POTTING.
14	ALL SHIELDED TERMINATIONS SHALL BE LOCATED BELOW REFERENCE LINE A. THERE SHALL BE NO EXPOSED CONDUCTORS AT THE SURFACE OF THE POTTING COMPOUND.
15	BEFORE LACING HARNESS, APPLY 2 TURNS OF TAPE TO INDICATE CABLE CLAMP LOCATION.
16	WRAP TAPE AROUND HARNESS IN AREA SHOWN AS REQUIRED TO BUILD UP DIAMETER TO FIT ~~CABLE CLAMP.~~ SHELL HOLE.
17	MARK CONNECTOR WITH REFERENCE DESIGNATION AS SHOWN .12 HIGH, BLACK, HOT IMPRESSION STAMPING PERND1002019, CENTRALIZE.
19	MARK CHARACTERS .12 HIGH, BLACK, PER ND1002019, SERIALIZE PER ND1002023.
20	CONTINUITY TEST PER CONDUCTOR CHART. RESISTANCE SHALL BE LESS THAN 1/2 OHM. TEST PER MIL-STD-202, METHOD 303.

MIL 2084 9-65

NOTE NUMBER	GENERAL NOTES DESCRIPTION
21	A. INSULATION RESISTANCE SHALL BE GREATER THAN 100 MEGOHMS WITH 500 VDC APPLIED BETWEEN 1. THE ASSEMBLY PINS AND STRUCTURE GROUND, WITH THE EXCEPTION OF THOSE PINS ELECTRICALLY CONNECTED TO STRUCTURE GROUND AND THOSE PINS SPECIFIED IN PAR. B. 2. EACH PIN AND ALL OTHER PINS NOT ELECTRICALLY CONNECTED, INCLUDING ALL SPARE PINS. B. INSULATION RESISTANCE SHALL BE GREATER THAN 100 MEGOHMS WITH 100 VDC APPLIED BETWEEN THE ASSEMBLY PINS ELECTRICALLY CONNECTED TO TB1-1 THRU TB1-12 AND STRUCTURE GROUND. TEST PER MIL-STD-202, METHOD 302, EXCEPT ELECTRIFICATION TIME NOT APPLICABLE.
22	PRESEAL BACK OF CONNECTOR P27 PRIOR TO ENCAPSULATION PER ND1002187 TYPE III USING ITEMS 36, 37, 38, AND 39.
23	ENCAPSULATE BACK OF CONNECTOR~~S~~ PER ND1002236 USING ITEMS 34 AND 35.
24	CONDUCTORS LISTED WITH AN A OR B IN THE REMARKS COLUMN ARE TO BE ASSEMBLED PER DETAIL A OR B AS SHOWN ON THE CONFIGURATION DRAWING.
25	GROUP SHIELDING - THREAD ONE CONTINUOUS LENGTH OF GROUND WIRE, ITEM 10, THROUGH CENTER OF EMI/RFI SHIELDING TAPE, ITEM 29. ALLOW 6 INCHES OF GROUND WIRE TO EXTEND BEYOND ENDS OF SHIELDING TAPE. WRAP CABLE WITH ONE CONTINUOUS LENGTH OF PREPARED SHIELDING. SUCCESSIVE TURNS SHALL OVERLAP BY APPROXIMATELY 1/2 THE WIDTH OF THE TAPE, WITH A MINIMUM OF RIDGES AND FOLDS.
26	COMPLETELY COVER SHIELD WITH ONE CONTINUOUS WRAP OF INSULATION TAPE, ITEM 32. SUCCESSIVE TURNS SHALL OVERLAP BY APPROXIMATELY 1/2 THE WIDTH OF THE TAPE, WITH A MINIMUM OF RIDGES AND FOLDS.
27	ASSEMBLE INSULATION TUBING, ITEM 30, OVER GROUND WIRE AS REQUIRED TO REACH TERMINATION. ASSEMBLE SHRINK SLEEVING AS SHOWN.
28	SOLDER PER ND1002071 USING ITEMS 48 AND 49.

MIL 2084 9-65

NOTE NUMBER	GENERAL NOTES DESCRIPTION
29	TWIST CONDUCTORS WITH THE SAME NUMBER PER ND1002032.
30	ASSEMBLE A LENGTH OF WIRE BRAID, ITEM 57, OVER CONDUCTORS H135, H136, AND H137. ALLOW 1.50 INCHES OF LEAD TO EXTEND BEYOND BRAID. COVER BRAID WITH TEFLON TAPE, ITEM 32, PER NOTE 26. ALLOW .25 INCH OF BRAID TO EXTEND BEYOND TAPE. FOLD BRAID OVER TAPE AND TERMINATE PER ND1002071, FIG. 6B.
31	CONDUCTORS SHALL ENTER CONNECTOR 56P27 THROUGH THE BRANCH SPECIFIED IN THE REMARKS COLUMN.

LEAD TOLERANCE CHART

	LEAD LG	JKT STRIP LG	SHIELD STRIP LG	LEAD CUT LG	INS STRIP LG
UNDER 3 INCHES	+ .12-.00	+.06-.06	+.06-.06	+.06-.06	+.06-.00
3 INCH TO 3 FT	+ .50-.00	+.25-.25	+.25-.25	+.25-.25	
3 FT TO 10 FT	+1.00-.00				
10 FT AND OVER	+2.00-.00				

SIZE	CODE IDENT NO.	
A	80230	2014648 ~~2014684~~
SCALE-NONE	REV LTR F	SHEET 5 OF 28

SEE NOTE

LIST OF MATERIALS

NUMBER	ITEM	QTY	PART NO.	DESCRIPTION
	1	1	2014648-001	WIRE PER 1010789-031, 12 AWG, YEL, 55 FT TOT LG
	2	1	2014648-002	WIRE PER 1010789-006, 22 AWG, YEL, 100 FT TOT LG
	3	1	2014648-003	WIRE PER 1010789-016, 26 AWG, YEL, 170 FT TOT LG
	4	1	2014648-004	WIRE PER 1010789-008, 22 AWG, YEL, RED, 10 FT TOT LG
	5	1	2014648-005	WIRE PER 1010789-017, 26 AWG, YEL, RED, 15 FT TOT LG
	6	1	2014648-006	WIRE PER 1010789-009, 22 AWG, YEL, RED, GRN, 30 FT TOT LG
	7	1	2014648-007	WIRE PER 1010789-019, 26 AWG, YEL, RED, GRN, BRN, 5 FT TOT LG
	8	1	2014648-008	WIRE PER 1010789-015, 26 AWG, YEL, RED, YEL JKT, 20 FT TOT LG
	9	1	2014648-009	WIRE PER 1010789-024, 26 AWG, BLK, 5 FT TOT LG
	10	1	2014648-010	WIRE PER QQ-W-343, TYPE C, CLASS C, 22 AWG, 30 FT TOT LG
	11	1	2014648-011	WIRE PER 1010789-002, 24 AWG, BLK, 5 FT TOT LG
	12	1	2014748-011	CONNECTOR, PLUG, ELECTRICAL, (56P27)
9	13	1	1010929-003	CONNECTOR, PLUG, ELECTRICAL, (56P25)
9	14	1	1010921- 1	CONNECTOR, PLUG, ELECTRICAL, (56P30)

SIZE	CODE IDENT NO.	
A	80230	2014648 ~~2014684~~
SCALE-NONE	REV LTR G	SHEET 6 OF 28

SEE NOTE

LIST OF MATERIALS

NUMBER	ITEM	QTY	PART NO.	DESCRIPTION
9	15	1	1010921- 2	CONNECTOR, PLUG, ELECTRICAL, (56P31)
9	16	1	1010930-003	CONNECTOR, RECEPTACLE, ELECTRICAL (56J5)
9	18	36	1010932- 2	CONTACT, PIN
9	19	X	1010770- 2	CONTACT, SOCKET, SUPPLIED WITH CONNECTORS 1010771, AND 1010930
9	20	56	1010955- 1	CONTACT, MALE
9	21	8	1010955- 2	CONTACT, MALE
	22	2	2014670- 11	ADAPTER, CONNECTOR
9	23	10	1010983- 1	PLUG, PROTECTIVE SEALING
9	24	28	1010958- 1	PLUG, PROTECTIVE SEALING
	25	1	2014757-011	POWER FILTER ASSEMBLY
9	29	AR	1010989	TAPE, SHIELDING, EMI/RFI
9	30	AR	1006776- 19	INSULATION SLEEVING
	32	AR	MIL-T-23594	TAPE, TEFLON, TYPE II, 1 INCH WIDE
	33	AR	MIL-T-23594	TAPE, TEFLON, TYPE II, 1/4 INCH WIDE
9	34	AR	1012503	COMPOUND, POTTING, POLYURETHANE
9	35	AR	1012504	PRIMER, METAL PARTS
9	36	AR	1006277	SILICA, PULVERIZED, PYROGENIC
9	37	AR	1008822	COLORANT, EPOXY BASE

SIZE	CODE IDENT NO.	
A	80230	2014648 ~~2014684~~
SCALE-NONE	REV LTR G	SHEET 7 OF 28

SEE NOTE

LIST OF MATERIALS

NUMBER	ITEM	QTY	PART NO.	DESCRIPTION
9	38	AR	1010661	EPOXY RESIN
9	39	AR	1010679	ADHESIVE ACTIVATOR
9	40	AR	1012507-004	TAPE, LACING AND TYING
9	42	7	1010945- 4	SPLICE REDUCER
9	43	1	1010945- 6	SPLICE REDUCER
	44	6	1006710-001	SPLICE
9	45	6	1012534- 92	INSULATION SLEEVING (HEAT SHRINKABLE)
9	46	7	1012534-112	INSULATION SLEEVING (HEAT SHRINKABLE)
9	47	1	1012534-122	INSULATION SLEEVING (HEAT SHRINKABLE)
	48	AR	QQ-S-571 SN60 WRAP 2	SOLDER
	49	AR	MIL-F-14256	FLUX
	50	4	MS17182-1	TERMINAL LUG
	51	4	MS35333-69	WASHER, LOCK
9	52	4	1006783- 93	SCREW, BUTTON HD
9	53	14	1010402- 2	SLEEVE, SOLDER
	54	1	MS35335-57	WASHER, LOCK
	55	1	MS25036-52	TERMINAL LUG
9	56	1	1006783- 18	SCREW, BUTTON HD

SIZE	CODE IDENT NO.	
A	80230	2014648 ~~2014684~~
SCALE-NONE	REV LTR F	SHEET 8 OF 28

SEE NOTE

LIST OF MATERIALS

NUMBER ITEM	QTY	PART NO.	DESCRIPTION
57	1	2014648-012	WIRE BRAID, QQ-B-575, .12 DIA, 36 AWG, 10 FT TOTAL LENGTH
58	1	1010630-14	SCREW, FLAT HD

SIZE	CODE IDENT NO.	
A	80230	2014648 ~~2014684~~
SCALE-NONE	REV LTR F	SHEET 9 OF 28

MIL 2084 9-65

LEAD IDENT	WIRE MATL ITEM	LEAD LG	CIRCUIT PT FROM (A) TO (B)	TERM.JKT AREA NO.	SHLD STRIP LG	LEAD CUT LG	INS STRIP LG	TIN	NOTE ONE, FIG	ACCESSORY ITEMS	REMARKS
H	1	1	P30-9				.13	NO		18	
			E21				.44	NO			LARGE END
H	2	1	P30-10				.13	NO		18	
			E21				.44	NO			LARGE END
H	3	2	P27-A6				.18	NO		20	
			E22				.63	NO			END A
H	4	2	P27-A7				.18	NO		20	
			E22				.63	NO			END A
H	5	2	P27-B6				.18	NO		20	
			E22				.63	NO			END A
H	6	2	P27-B7				.18	NO		20	
			E22				.63	NO			END A
H	7	2	P27-C6				.18	NO		20	
			E22				.63	NO			END A
H	8	2	P27-C7				.18	NO		20	
			E22				.63	NO			END A
H	9	2	P27-D6				.18	NO		20	
			E22				.63	NO			END A
H	10	1	P31-9				.13	NO		18	
			E23				.44	NO			LARGE END
H	11	1	P31-10				.13	NO		18	
			E23				.44	NO			LARGE END
H	12	2	P27-A3				.18	NO		20	
			E24				.37	NO			END A

SIZE	CODE IDENT NO.	
A	80230	2014648 ~~2014684~~
SCALE-NONE	REV LTR F	SHEET 10 OF 28

MIL 2084 9-65

LEAD IDENT	WIRE MATL ITEM	LEAD LG	CIRCUIT PT FROM (A) TO (B)	TERM.JKT AREA NO.	SHLD STRIP LG	LEAD CUT LG	INS STRIP LG	TIN	NOTE ONE, FIG	ACCESSORY ITEMS	REMARKS
H	13	2	P27-A4				.18	NO		20	
			E24				.37	NO			END A
H	14	2	P27-A5				.18	NO		20	
			E24				.37	NO			END A
H	15	2	P27-B4				.18	NO		20	
			E24				.37	NO			END A
H	16	2	P27-B5				.18	NO		20	
			E24				.37	NO			END A
H	17	2	P27-C4				.18	NO		20	
			E24				.37	NO			END A
H	18	2	P27-C5				.18	NO		20	
			E24				.37	NO			END A
H	19	1	P30-8				.13	NO		18	
			T81-11				.25	YES			
H	20	2	P27-F7				.18	NO		20	
			T81-11				.25	YES			
H	21	2	P27-G7				.18	NO		20	
			T81-11				.25	YES			
H	22	2	P27-H7				.18	NO		20	
			T81-11				.25	YES			
H	23	1	P31-8				.13	NO		18	
			T81-12				.25	YES			
H	24	2	P27-F8				.18	NO		20	
			T81-12				.25	YES			

SIZE	CODE IDENT NO.	
A	80230	2014648 ~~2014684~~
SCALE-NONE	REV LTR F	SHEET 11 OF 28

MIL 2084 9-65

LEAD IDENT	WIRE MATL ITEM	LEAD LG	CIRCUIT PT FROM (A) TO (B)	TERM.JKT AREA NO.	SHLD STRIP LG	LEAD CUT LG	INS STRIP LG	TIN	NOTE ONE, FIG	ACCESSORY ITEMS	REMARKS
H	25	2	P27-G8				.18	NO		20	
			T81-12				.25	YES			
H	26	2	P27-H8				.18	NO		20	
			T81-12				.25	YES			
H	27	1	P30-3				.13	NO		18	
			E25				.44	NO			LARGE END
H	28	1	P30-15				.13	NO		18	
			E25				.44	NO			LARGE END
H	29	1	P30-16				.13	NO		18	
			E26				.53	NO			SMALL END
H	30	1	P31-3				.13	NO		18	
			E26				.53	NO			SMALL END
H	31	1	P31-15				.13	NO		18	
			E27				.44	NO			LARGE END
H	32	1	P31-16				.13	NO		18	
			E27				.44	NO			LARGE END
H	33	2	P27-B8				.18	NO		20	
			E28				.63	NO			SMALL END
H	34	2	P27-B9				.18	NO		20	
			E28				.63	NO			SMALL END
H	35	2	P27-C8				.18	NO		20	
			E28				.63	NO			SMALL END
H	36	2	P27-C9				.18	NO		20	
			E28				.63	NO			SMALL END

SIZE	CODE IDENT NO.	
A	80230	2014648 ~~2014684~~
SCALE-NONE	REV LTR F	SHEET 12 OF 28

MIL 2084 9-65

LEAD IDENT	WIRE MATL ITEM	LEAD LG	CIRCUIT PT FROM (A) TO (B)	TERM. AREA NO.	JKT STRIP LG	SHLD STRIP LG	LEAD CUT LG	INS STRIP LG	TIN	NOTE ONE, FIG	ACCESSORY ITEMS	REMARKS
H 37	2		P27-D7					.18	NO		20	
			E28					.63	NO			SMALL END
H 38	2		P27-D8					.18	NO		20	
			E29					.37	NO			END A
H 39	2		P27-D9					.18	NO		20	
			E29					.37	NO			END A
H 40	2		P27-F9					.18	NO		20	
			E29					.37	NO			END A
H 41	2		P27-G9					.18	NO		20	
			E29					.37	NO			END A
H 42	2		P27-H9					.18	NO		20	
			E29					.37	NO			END A
H 43	1		P30-7					.13	NO		18	
			TB1-1					.25	YES			
H 44	1		P31-7					.13	NO		18	
			TB1-2					.25	YES			
H 45	1		P30-14					.13	NO		18	
			E30					.44	NO			LARGE END
H 46	1		P31-14					.13	NO		18	
			E30					.44	NO			LARGE END
H 47	6											
H 47G			P27-B3					.18	NO		20	
			TB1-1					.25	YES			

SIZE	CODE IDENT NO.	
A	80230	2014648 ~~2014684~~
SCALE-NONE	REV LTR F	SHEET 13 OF 28

MIL 2084 9-65

LEAD IDENT	WIRE MATL ITEM	LEAD LG	CIRCUIT PT FROM (A) TO (B)	TERM. AREA NO.	JKT STRIP LG	SHLD STRIP LG	LEAD CUT LG	INS STRIP LG	TIN	NOTE ONE, FIG	ACCESSORY ITEMS	REMARKS
H 47R			P27-B2					.18	NO		20	
			TB1-2					.25	YES			
H 47Y			P27-B1					.18	NO		20	
			TB1-6					.25	YES			
H 48	6											
H 48G			P27-C3					.18	NO		20	
			TB1-1					.25	YES			
H 48R			P27-C2					.18	NO		20	
			TB1-2					.25	YES			
H 48Y			P27-C1					.18	NO		20	
			TB1-6					.25	YES			
H 49	6											
H 49G			P27-D3					.18	NO		20	
			TB1-1					.25	YES			
H 49R			P27-D2					.18	NO		20	
			TB1-2					.25	YES			
H 49Y			P27-D1					.18	NO		20	
			TB1-6					.25	YES			
H 50	6											
H 50G			P27-F3					.18	NO		20	
			TB1-1					.25	YES			

SIZE	CODE IDENT NO.	
A	80230	2014648 ~~2014684~~
SCALE-NONE	REV LTR F	SHEET 14 OF 28

MIL 2084 9-65

LEAD IDENT	WIRE MATL ITEM	LEAD LG	CIRCUIT PT FROM (A) TO (B)	TERM. AREA NO.	JKT STRIP LG	SHLD STRIP LG	LEAD CUT LG	INS STRIP LG	TIN	NOTE ONE, FIG	ACCESSORY ITEMS	REMARKS
H 50R			P27-F2					.18	NO		20	
			TB1-2					.25	YES			
H 50Y			P27-F1					.18	NO		20	
			TB1-6					.25	YES			
H 51	1		P30-2					.13	NO		18	
			TB1-7					.25	YES			
H 52	1		P31-2					.13	NO		18	
			TB1-8					.25	YES			
H 53	1		P30-1					.13	NO		18	
			E33					.44	NO			LARGE END
H 54	1		P31-1					.13	NO		18	
			E33					.44	NO			LARGE END
H 55	6											A
H 55G			J5-53					.13	NO		19	A
			E31					.37	NO			END A
H 55R			J5-78					.13	NO		19	A
			E32					.37	NO			END A
H 55Y			J5-54					.13	NO		19	A
			E34					.37	NO			END A
H 56	6											A
H 56G			J5-79					.13	NO		19	A
			E31					.37	NO			END A

SIZE	CODE IDENT NO.	
A	80230	2014648 ~~2014684~~
SCALE-NONE	REV LTR F G	SHEET 15 OF 28

MIL 2084 9-65

LEAD IDENT	WIRE MATL ITEM	LEAD LG	CIRCUIT PT FROM (A) TO (B)	TERM. AREA NO.	JKT STRIP LG	SHLD STRIP LG	LEAD CUT LG	INS STRIP LG	TIN	NOTE ONE, FIG	ACCESSORY ITEMS	REMARKS
H 56R			J5-80					.13	NO		19	A
			E32					.37	NO			END A
H 56Y			J5-55					.13	NO		19	A
			E34					.37	NO			END A
H 57	6											A
H 57G			J5-33					.13	NO		19	A
			E31					.37	NO			END A
H 57R			J5-32					.13	NO		19	A
			E32					.37	NO			END A
H 57Y			J5-16					.13	NO		19	A
			E34					.37	NO			END A
H 58	6											A
H 58G			J5-81					.13	NO		19	A
			E31					.37	NO			END A
H 58R			J5-57					.13	NO		19	A
			E32					.37	NO			END A
H 58Y			J5-56					.13	NO		19	A
			E34					.37	NO			END A
H 59	6											A
H 59G			J5-58					.13	NO		19	A
			E31					.37	NO			END A

SIZE	CODE IDENT NO.	
A	80230	2014648 ~~2014684~~
SCALE-NONE	REV LTR F G	SHEET 16 OF 28

MIL 2084 9-65

WIRING HARNESS H ~~2014684~~ F

LEAD IDENT	WIRE MATL ITEM	LEAD LG	CIRCUIT PT FROM (A) TO (B)	TERM. AREA NO.	JKT STRIP LG	SHLD STRIP LG	LEAD CUT LG	INS STRIP LG	TIN	NOTE ONE, FIG	ACCESSORY ITEMS	REMARKS
H 59R			J5-34					.13	NO		19	A
			E32					.37	NO			END A
H 59Y			J5-35					.13	NO		19	A
			E34					.37	NO			END A
H 61	1		P30-4					.13	NO		18	
			TB1-10					.25	YES			
H 62	1		P31-4					.13	NO		18	
			TB1-10					.25	YES			
H 63R	1		P30-17					.13	NO		18	
			TB1-13					.25	YES			
H 63Y	1		P30-18					.13	NO		18	
			TB1-14					.25	YES			
H 67	5											
H 67R			P25-83					.13	NO		19	
			P27-K5					.18	NO		21	
H 67Y			P25-84					.13	NO		19	
			P27-K4					.18	NO		21	
H 68	7											
H 68G			P25-55					.13	NO		19	
			P27-H4					.22	NO			
H 68N			P25-53					.13	NO		19	
			P27-H4					.22	NO		20	

SIZE	CODE IDENT NO.	
A	80230	2014648 ~~2014684~~
SCALE-NONE	REV LTR F	SHEET 17 OF 28

MIL 2084 9-65

WIRING HARNESS H ~~2014684~~ G

LEAD IDENT	WIRE MATL ITEM	LEAD LG	CIRCUIT PT FROM (A) TO (B)	TERM. AREA NO.	JKT STRIP LG	SHLD STRIP LG	LEAD CUT LG	INS STRIP LG	TIN	NOTE ONE, FIG	ACCESSORY ITEMS	REMARKS
H 68R			P25-31					.13	NO		19	
			P27-H5					.18	NO		21	
H 68Y			P25-54					.13	NO		19	
			P27-G5					.18	NO		21	
H 69	2		P25-57					.13	NO		19	
			P27-G4					.18	NO		20	
H 70	3		J5-62					.13	NO		19	B
			P25-51					.13	NO		19	
H 71	3		J5-63					.13	NO		19	B
			P25-78					.13	NO		19	
H 72	3		J5-38					.13	NO		19	B
			P25-77					.13	NO		19	
H 73	3		J5-40					.13	NO		19	B
			P25-76					.13	NO		19	
H 74	3		J5-39					.13	NO		19	B
			P25-79					.13	NO		19	
H 75	3		J5-64					.13	NO		19	B
			P25-49					.13	NO		19	
H 76	2		J5-66					.13	NO		19	B
			P25-30					.13	NO		19	
H 77	3		J5-65					.13	NO		19	B
			P25-75					.13	NO		19	
H 78	2		J5-41					.13	NO		19	B
			P25-28					.13	NO		19	

SIZE	CODE IDENT NO.	
A	80230	2014648 ~~2014684~~
SCALE-NONE	REV LTR F	SHEET 18 OF 28

MIL 2084 9-65

WIRING HARNESS H ~~2014684~~ F

LEAD IDENT	WIRE MATL ITEM	LEAD LG	CIRCUIT PT FROM (A) TO (B)	TERM. AREA NO.	JKT STRIP LG	SHLD STRIP LG	LEAD CUT LG	INS STRIP LG	TIN	NOTE ONE, FIG	ACCESSORY ITEMS	REMARKS
H 79	2		J5-42					.13	NO		19	B
			P25-48					.13	NO		19	
H 80	3		J5-52					.13	NO		19	B
			P25-2					.13	NO		19	
H 81	3		J5-76					.13	NO		19	B
			P25-9					.13	NO		19	
H 82	3		J5-30					.13	NO		19	B
			P25-22					.13	NO		19	
H 83	3		J5-29					.13	NO		19	B
			P25-41					.13	NO		19	
H 84	3		J5-14					.13	NO		19	B
			P25-66					.13	NO		19	
H 85	3		J5-50					.13	NO		19	B
			P25-3					.13	NO		19	
H 86	3		J5-74					.13	NO		19	B
			P25-10					.13	NO		19	
H 87	3		J5-75					.13	NO		19	B
			P25-23					.13	NO		19	
H 88	3		J5-51					.13	NO		19	B
			P25-42					.13	NO		19	
H 89	3		J5-77					.13	NO		19	B
			P25-67					.13	NO		19	
H 90	3		J5-27					.13	NO		19	B
			P25-12					.13	NO		19	

SIZE	CODE IDENT NO.	
A	80230	2014648 ~~2014684~~
SCALE-NONE	REV LTR F	SHEET 19 OF 28

MIL 2084 9-65

WIRING HARNESS H ~~2014684~~ F

LEAD IDENT	WIRE MATL ITEM	LEAD LG	CIRCUIT PT FROM (A) TO (B)	TERM. AREA NO.	JKT STRIP LG	SHLD STRIP LG	LEAD CUT LG	INS STRIP LG	TIN	NOTE ONE, FIG	ACCESSORY ITEMS	REMARKS
H 91	3		J5-13					.13	NO		19	B
			P25-11					.13	NO		19	
H 92	3		J5-28					.13	NO		19	B
			P25-24					.13	NO		19	
H 93	3		J5-73					.13	NO		19	B
			P25-43					.13	NO		19	
H 94	3		J5-49					.13	NO		19	B
			P25-68					.13	NO		19	
H 95	2		J5-45					.13	NO		19	B
			P25-7					.13	NO		19	
H 96	3		J5-72					.13	NO		19	B
			P25-27					.13	NO		19	
H 97	3		J5-48					.13	NO		19	B
			P25-45					.13	NO		19	
H 98	3		J5-47					.13	NO		19	B
			P25-26					.13	NO		19	
H 99	3		J5-71					.13	NO		19	B
			P25-25					.13	NO		19	
H 100	3		J5-4					.13	NO		19	B
			P25-47					.13	NO		19	
H 101	3		J5-22					.13	NO		19	B
			P25-70					.13	NO		19	
H 102	3		J5-46					.13	NO		19	B
			P25-46					.13	NO		19	

SIZE	CODE IDENT NO.	
A	80230	2014648 ~~2014684~~
SCALE-NONE	REV LTR F	SHEET 20 OF 28

MIL 2084 9-65

WIRING HARNESS H ~~2014684~~ F

LEAD IDENT	WIRE MATL ITEM	LEAD LG	CIRCUIT PT FROM (A) TO (B)	TERM. AREA NO.	JKT STRIP LG	SHLD STRIP LG	LEAD CUT LG	INS STRIP LG	TIN	NOTE ONE, FIG	ACCESSORY ITEMS	REMARKS
H 103	2		J5-70					.13	NO		19	B
			P25-73					.13	NO		19	
H 104	3		J5-25					.13	NO		19	B
			P25-13					.13	NO		19	
H 105	3		J5-26					.13	NO		19	B
			P25-72					.13	NO		19	
H 106	3		J5-11					.13	NO		19	B
			P25-74					.13	NO		19	
H 107	3		J5-23					.13	NO		19	B
			P25-44					.13	NO		19	
H 108	3		J5-12					.13	NO		19	B
			P25-71					.13	NO		19	
H 109	3		J5-10					.13	NO		19	B
			P25-69					.13	NO		19	
H 110	3		J5-24					.13	NO		19	B
			P25-18					.13	NO		19	
H 111	2		J5-44					.13	NO		19	B
			P25-21					.13	NO		19	
H 112	2		J5-68					.13	NO		19	B
			P25-8					.13	NO		19	
H 113	2		J5-43					.13	NO		19	B
			P25-1					.13	NO		19	
H 120	2		P27-G3					.18	NO		20	
			T81-15					.25	YES			

SIZE	CODE IDENT NO.	
A	80230	2014648 ~~2014684~~
SCALE-NONE	REV LTR F	SHEET 21 OF 28

MIL 2084 9-65

WIRING HARNESS H ~~2014684~~ F G

LEAD IDENT	WIRE MATL ITEM	LEAD LG	CIRCUIT PT FROM (A) TO (B)	TERM. AREA NO.	JKT STRIP LG	SHLD STRIP LG	LEAD CUT LG	INS STRIP LG	TIN	NOTE ONE, FIG	ACCESSORY ITEMS	REMARKS
H 121	2		P27-F4					.18	NO		20	
			T81-16					.25	YES			
H 122	1		P30-6					.13	NO		18	
			T81-15					.25	YES			
H 123	1		P31-6					.13	NO		18	
			T81-16					.25	YES			
H 128	6											A
H 128G			J5-31					.13	NO		19	A
			E31					.37	NO			END A
H 128R			J5-15					.13	NO		19	A
			E32					.37	NO			END A
H 128Y			J5-5					.13	NO		19	A
			E34					.37	NO			END A
H 129	5											
H 129R			P25-15					.13	NO		19	
			P27-F6					.18	NO		21	
H 129Y			P25-32					.13	NO		19	
			P27-G6					.18	NO		21	
H 130	4											
H 130R			J5-60					.13	NO		19	
			T81-10					.25	YES			

SIZE	CODE IDENT NO.	
A	80230	2014648 ~~2014684~~
SCALE-NONE	REV LTR F G	SHEET 22 OF 28

MIL 2084 9-65

WIRING HARNESS H ~~2014684~~ F

LEAD IDENT	WIRE MATL ITEM	LEAD LG	CIRCUIT PT FROM (A) TO (B)	TERM. AREA NO.	JKT STRIP LG	SHLD STRIP LG	LEAD CUT LG	INS STRIP LG	TIN	NOTE ONE, FIG	ACCESSORY ITEMS	REMARKS
H 130Y			J5-84					.13	NO		19	
			T81-10					.25	YES			
H 131	8				1.00	.75				6B	53	
					1.75	1.50				6B	53	
H 131A	11		SHLD H131					.20	NO			
			P27-H2					.18	NO		20	
H 131B	11		T81-15					.25	YES			
			SHLD H131					.20	NO			
H 131R			P27-K3					.18	NO		21	
			T81-13					.25	YES			
H 131Y			P27-H3					.18	NO		21	
			T81-14					.25	YES			
H 132	8				1.00	.75				6B	53	
					1.75	1.50				6B	53	
H 132A	11		SHLD H132					.20	NO			
			E16					.19	NO			
H 132B	9		P27-H6					.22	NO			
			SHLD H132					.20	NO			
H 132R			J5-19					.13	NO		19	
			P27-K6					.22	NO			
H 132Y			J5-18					.13	NO		19	
			P27-K7					.22	NO			
H 133	8				1.00	.75				6B	53	
					1.75	1.50				6B	53	

SIZE	CODE IDENT NO.	
A	80230	2014648 ~~2014684~~
SCALE-NONE	REV LTR F	SHEET 23 OF 28

MIL 2084 9-65

WIRING HARNESS H ~~2014684~~ F G

LEAD IDENT	WIRE MATL ITEM	LEAD LG	CIRCUIT PT FROM (A) TO (B)	TERM. AREA NO.	JKT STRIP LG	SHLD STRIP LG	LEAD CUT LG	INS STRIP LG	TIN	NOTE ONE, FIG	ACCESSORY ITEMS	REMARKS
H 133A	11		SHLD H133					.20	NO			
			E17					.19	NO			
H 133B	9		P27-H6					.22	NO		20	
			SHLD H133					.20	NO			
H 133R			P25-38					.13	NO		19	
			P27-K6					.22	NO		20	
H 133Y			P25-40					.13	NO		19	
			P27-K7					.22	NO		20	
H 134	8				1.00	.75				6B	53	
					1.75	1.50				6B	53	
H 134A	11		SHLD H134					.20	NO			
			E16					.19	NO			
H 134B	11		E17					.19	NO		50	
			SHLD H134					.20	NO			
H 134R			J5-7					.13	NO		19	
			P25-5					.13	NO		19	
H 134Y			J5-8					.13	NO		19	
			P25-4					.13	NO		19	
H 135	4									6B	53	SEE NOTE 29
										6B	53	
H 135A	11		SHLD H135					.20	NO			
			E17					.19	NO		50	
H 135B	11		T81-16					.25	YES			
			SHLD H135					.20	NO			

SIZE	CODE IDENT NO.	
A	80230	2014648 ~~2014684~~
SCALE-NONE	REV LTR F G	SHEET 24 OF 28

MIL 2084 9-65

WIRING HARNESS H ~~2014684~~ ~~E~~ F

LEAD IDENT	WIRE MATL ITEM	LEAD LG	CIRCUIT PT FROM (A) TO (B)	TERM. AREA NO.	JKT STRIP LG	SHLD STRIP LG	LEAD CUT LG	INS STRIP LG	TIN	NOTE ONE, FIG	ACCESSORY ITEMS	REMARKS
H 135R			P25-62					.13	NO		19	
			TB1-17					.25	YES			
H 135Y			P25-63					.13	NO		19	
			TB1-18					.25	YES			
H 136	4									6B	53	SEE NOTE ~~30~~ 29
										6B	53	
H 136A	11		SHLD H136					.20	NO			
			E18					.19	NO			
H 136B	11		TB1-~~TB1-16~~ 16					.25	~~NO~~ YES			
			~~TB1-16~~ SHLD H136					.20	~~YES~~ NO			
H 136R			P25-64					.13	NO		19	
			TB1-17					.25	YES			
H 136Y			P25-65					.13	NO		19	
			TB1-18					.25	YES			
H 137	4									6B	53	SEE NOTE ~~30~~ 29
										6B	53	
H 137A	11		SHLD H137					.20	NO			
			E16					.19	NO		50	
H 137B	11		TB1-~~TB1-16~~ 16					.25	~~NO~~ YES			
			~~TB1-16~~ SHLD H137					.20	~~YES~~ NO			
H 137R			J5-9					.13	NO		19	
			TB1-17					.25	YES			
H 137Y			J5-2					.13	NO		19	
			TB1-18					.25	YES			

SIZE	CODE IDENT NO.	
A	80230	2014648 ~~2014684~~
SCALE-NONE	REV LTR ~~E~~ G	SHEET 25 OF 28

MIL 2084 9-65

WIRING HARNESS H ~~2014684~~ F

LEAD IDENT	WIRE MATL ITEM	LEAD LG	CIRCUIT PT FROM (A) TO (B)	TERM. AREA NO.	JKT STRIP LG	SHLD STRIP LG	LEAD CUT LG	INS STRIP LG	TIN	NOTE ONE, FIG	ACCESSORY ITEMS	REMARKS
H 138	10		E20					.19	NO		55	A
			E15					.19	NO			
H 139	10		E15					.19	NO		50	B
			E18					.19	NO			
H 141	1		E21					.53	NO		42, 46	SMALL END
			TB1-3					.25	YES			
H 142	1		E22					.30	NO		44, 45	END B
			TB1-3					.25	YES			
H 143	1		E23					.53	NO		42, 46	SMALL END
			TB1-4					.25	YES			
H 144	1		E24					.30	NO		44, 45	END B
			TB1-4					.25	YES			
H 145	1		E25					.53	NO		42, 46	SMALL END
			E26					.50	NO			LARGE END
H 146	1		E26					.50	NO			LARGE END
			E27					.53	NO		42, 46	SMALL END
H 147	1		E26					.50	NO		43, 47	LARGE END
			TB1-5					.25	YES			
H 148	1		E28					.44	NO			LARGE END
			E29					.30	NO		44, 45	END B
H 149	1		E28					.44	NO		42, 46	LARGE END
			TB1-5					.25	YES			
H 150	1		E30					.53	NO		42, 46	SMALL END
			TB1-6					.25	YES			

SIZE	CODE IDENT NO.	
A	80230	2014648 ~~2014684~~
SCALE-NONE	REV LTR F	SHEET 26 OF 28

MIL 2084 9-65

WIRING HARNESS H ~~2014684~~ F

LEAD IDENT	WIRE MATL ITEM	LEAD LG	CIRCUIT PT FROM (A) TO (B)	TERM. AREA NO.	JKT STRIP LG	SHLD STRIP LG	LEAD CUT LG	INS STRIP LG	TIN	NOTE ONE, FIG	ACCESSORY ITEMS	REMARKS
H 151	1		E31					.30	NO		44, 45	END B
			TB1-7					.25	YES			
H 152	1		E32					.30	NO		44, 45	END B
			TB1-8					.25	YES			
H 153	1		E33					.53	NO		42, 46	SMALL END
			TB1-9					.25	YES			
H 154	1		E34					.30	NO		44, 45	END B
			TB1-9					.25	YES			

SIZE	CODE IDENT NO.	
A	80230	2014648 ~~2014684~~
SCALE-NONE	REV LTR F	SHEET 27 OF 28

MIL 2084 9-65

CONFIGURATION INCOMPLETE

SIZE	CODE IDENT. NO.	
A	80230	2014648
SCALE NONE	REV LTR F	SHEET 28 of 28

MIL 2084 9-65

APPLICATION		REVISIONS			
NEXT ASSY	USED ON	SYM	DESCRIPTION	DATE	APPROVAL
		F	REPLACES REV(E) WITH CHANGE PER TDRR		
		G	CHANGED PER TDRR 24813		
		H	Revised per TDRR 25306	2-4-66	

REPLACES REV E WITH CHANGE

REV	F	G	F	G	G	F	F	F																		
SHEET	21	22	23	24	25	26	27	28																		
REV STATUS	REV						H	F	G	G	H	G	G	F	F	F	F	F	F	G	G	F	F	F	F	
OF SHEETS	SHEET						1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16	17	18	19	20

AC ELECTRONICS DIVISION
GENERAL MOTORS CORP. MILWAUKEE WIS.

MANNED
SPACECRAFT CENTER
HOUSTON, TEXAS

DRAWN R. Rohr 9 DEC '65
DATE
CHECKED W. Diehl 9 DEC. '65
APPROVAL E. PETERSON 10 DEC. '65
APPROVAL

G & N INTERCONNECT HARNESS "H"

(C/M, BLOCK II)

NASA APPROVAL A. C. METZGER
MIT APPROVAL

CODE IDENT NO.	SIZE		REV
80230	A	2014648	H

CONTRACT NAS9-497 | SCALE | SHEET 1 OF 28

NOTE NUMBER	GENERAL NOTES DESCRIPTION
1	SHIELD TERMINATION FIGURES ARE PER ND1002071 FOR FIGURE 6B AND ND 1002032 FOR FIGURE 7.
2	INTERPRET DRAWING IN ACCORDANCE WITH STANDARDS PRESCRIBED BY MIL-D-70327.
3	INTERCONNECT LIST FOR THIS HARNESS IS 2014678.
4	PARTIAL CIRCUIT POINTS ARE SHOWN. PREFIX WITH UNIT NUMBER 56 FOR COMPLETE CIRCUIT POINT
5	THE SUFFIX LETTER OF A CONDUCTOR IDENTIFICATION NUMBER IDENTIFIES A SHIELD LEAD, COLOR, OR MARKED LETTER. A - FROM END OF SHIELD B - TO END OF SHIELD G - GREEN K - BLACK L - BLUE N - BROWN R - RED W - WHITE Y - YELLOW
6	ASTERISK DENOTES LOWER CASE LETTER
7	GRID MODULE ON PICTURE SHEET IS 1 INCH TRUE POSITION
8	UNLESS OTHERWISE SPECIFIED FEATURE CENTERLINES ON PICTURE SHEET ARE LOCATED WITHIN + OR - .25. ENDS OF HOOKUP WIRES OR ACCESSORIES ARE LOCATED WITHIN .12.
9	VENDOR ITEM - SEE SOURCE CONTROL OR SPECIFICATION CONTROL DRAWING.
10	CRIMP CONTACTS PER ND1002032.

SIZE	CODE IDENT NO.	
A	80230	2014648 ~~2014684~~
SCALE-NONE	REV LTR F	SHEET 2 OF 28

MIL 2084 9-65

NOTE NUMBER	GENERAL NOTES DESCRIPTION
11	ALL UNUSED ~~GROMMET HOLES~~ CONTACT CAVITIES SHALL BE FILLED WITH A CONTACT OR CONTACT AND SEALING PLUG, AS FOLLOWS CONNECTOR 56~~P13~~P15 AND P~~18~~22 USE ITEM NUMBERS 19 AND 24. CONNECTOR 56P27, USE ITEM NUMBER 20. CONNECTOR 56P30, AND 31 USE ITEM NUMBERS 18 AND 23.
12	LACE HARNESS PER ND1002032 USING ITEM NUMBER 40.
13	A SMALL QUANTITY OF POTTING COMPOUND MUST BE PUT BETWEEN THE THREADED PORTION OF CONNECTOR AND SILICONE RUBBER GROMMET TO SEAL AND BOND RING TO CONNECTOR PRIOR TO POTTING.
14	ALL SHIELDED TERMINATIONS SHALL BE LOCATED BELOW REFERENCE LINE A. THERE SHALL BE NO EXPOSED CONDUCTORS AT THE SURFACE OF THE POTTING COMPOUND.
15	BEFORE LACING HARNESS, APPLY 2 TURNS OF TAPE TO INDICATE CABLE CLAMP LOCATION.
16	WRAP TAPE AROUND HARNESS IN AREA SHOWN AS REQUIRED TO BUILD UP DIAMETER TO FIT ~~CABLE CLAMP~~ SHELL HOLE.
17	MARK CONNECTOR WITH REFERENCE DESIGNATION AS SHOWN .12 HIGH, BLACK, HOT IMPRESSION STAMPING PERND1002019, CENTRALIZE.
19	MARK CHARACTERS .12 HIGH, BLACK, PER ND1002019, SERIALIZE PER ND1002023.
20	CONTINUITY TEST PER CONDUCTOR CHART. RESISTANCE SHALL BE LESS THAN 1/2 OHM. TEST PER MIL-STD-202, METHOD 303.

SIZE	CODE IDENT NO.	
A	80230	2014648 ~~2014684~~
SCALE-NONE	REV LTR F G	SHEET 3 OF 28

MIL 2084 9-65

NOTE NUMBER	GENERAL NOTES DESCRIPTION
21	A. INSULATION RESISTANCE SHALL BE GREATER THAN 100 MEGOHMS WITH 500 VDC APPLIED BETWEEN 1. THE ASSEMBLY PINS AND STRUCTURE GROUND, WITH THE EXCEPTION OF THOSE PINS ELECTRICALLY CONNECTED TO STRUCTURE GROUND AND THOSE PINS SPECIFIED IN PAR. B. 2. EACH PIN AND ALL OTHER PINS NOT ELECTRICALLY CONNECTED, INCLUDING ALL SPARE PINS. B. INSULATION RESISTANCE SHALL BE GREATER THAN 100 MEGOHMS WITH 100 VDC APPLIED BETWEEN THE ASSEMBLY PINS ELECTRICALLY CONNECTED TO TB1-1 THRU TB1-12 AND STRUCTURE GROUND. TEST PER MIL-STD-202, METHOD 302, EXCEPT ELECTRIFICATION TIME NOT APPLICABLE.
22	PRESEAL BACK OF CONNECTOR P27 PRIOR TO ENCAPSULATION PER ND1002187 TYPE III USING ITEMS 36, 37, 38, AND 39.
23	ENCAPSULATE BACK OF CONNECTOR~~S P27~~ PER ND1002236 USING ITEMS 34 AND 35.
24	CONDUCTORS LISTED WITH AN A OR B IN THE REMARKS COLUMN ARE TO BE ASSEMBLED PER DETAIL A OR B AS SHOWN ON THE CONFIGURATION DRAWING.
25	GROUP SHIELDING - THREAD ONE CONTINUOUS LENGTH OF GROUND WIRE, ITEM 10, THROUGH CENTER OF EMI/RFI SHIELDING TAPE, ITEM 29. ALLOW 6 INCHES OF GROUND WIRE TO EXTEND BEYOND ENDS OF SHIELDING TAPE. WRAP CABLE WITH ONE CONTINUOUS LENGTH OF PREPARED SHIELDING. SUCCESSIVE TURNS SHALL OVERLAP BY APPROXIMATELY 1/2 THE WIDTH OF THE TAPE, WITH A MINIMUM OF RIDGES AND FOLDS.
26	COMPLETELY COVER SHIELD WITH ONE CONTINUOUS WRAP OF INSULATION TAPE, ITEM 32. SUCCESSIVE TURNS SHALL OVERLAP BY APPROXIMATELY 1/2 THE WIDTH OF THE TAPE, WITH A MINIMUM OF RIDGES AND FOLDS.
27	ASSEMBLE INSULATION TUBING, ITEM 30, OVER GROUND WIRE AS REQUIRED TO REACH TERMINATION. ASSEMBLE SHRINK SLEEVING AS SHOWN.
28	SOLDER PER ND1002071 USING ITEMS 48 AND 49.

SIZE	CODE IDENT NO.	
A	80230	2014648 ~~2014684~~
SCALE-NONE	REV LTR F G	SHEET 4 OF 28

MIL 2084 9-65

NOTE NUMBER	GENERAL NOTES DESCRIPTION
29	TWIST CONDUCTORS WITH THE SAME NUMBER PER ND1002032.
30	ASSEMBLE A LENGTH OF WIRE BRAID, ITEM 57, OVER CONDUCTORS H135, H136, AND H137. ALLOW 1.50 INCHES OF LEAD TO EXTEND BEYOND BRAID. COVER BRAID WITH TEFLON TAPE, ITEM 32, PER NOTE 26. ALLOW .25 INCH OF BRAID TO EXTEND BEYOND TAPE. FOLD BRAID OVER TAPE AND TERMINATE PER ND1002071, FIG. 6B.
31	CONDUCTORS SHALL ENTER CONNECTOR 56P27 THROUGH THE BRANCH SPECIFIED IN THE REMARKS COLUMN.

LEAD TOLERANCE CHART

	LEAD LG	JKT STRIP LG	SHIELD STRIP LG	LEAD CUT LG	INS STRIP LG
UNDER 3 INCHES	+ .12-.00	+.06-.06	+.06-.06	+.06-.06	+.06-.00
3 INCH TO 3 FT	+ .50-.00	+.25-.25	+.25-.25	+.25-.25	
3 FT TO 10 FT	+1.00-.00				
10 FT AND OVER	+2.00-.00				

32 Perform Workmanship Vibration:

A. Sinusoidal sweep at 3.5 g rms. Limited to 0.3 inch peak to peak displacement, from 10 to 2000 cps at a rate of 4 octaves per minute.

B. Vibration along the X axis of the space craft.

C. Monitor for discontinuities of 10μ seconds or greater during vibration.

D. Complete continutiy and insulation resistance testing must be accomplished after vibration.

SIZE	CODE IDENT NO.	
A	80230	2014648 ~~2014684~~
SCALE-NONE	REV LTR H	SHEET 5 OF 28

MIL 2084 9-65

SEE NOTE

LIST OF MATERIALS

NUMBER	ITEM	QTY	PART NO.	DESCRIPTION
	1	1	2014646-001	WIRE PER 1010789-031, 12 AWG, YEL, 55 FT TOT LG
	2	1	2014648-002	WIRE PER 1010789-006, 22 AWG, YEL, 100 FT TOT LG
	3	1	2014648-003	WIRE PER 1010789-016, 26 AWG, YEL, 170 FT TOT LG
	4	1	2014648-004	WIRE PER 1010789-008, 22 AWG, YEL, RED, 10 FT TOT LG
	5	1	2014648-005	WIRE PER 1010789-017, 26 AWG, YEL, RED, 15 FT TOT LG
	6	1	2014648-006	WIRE PER 1010789-009, 22 AWG, YEL, RED, GRN, 30 FT TOT LG
	7	1	2014648-007	WIRE PER 1010789-019, 26 AWG, YEL, RED, GRN, BRN, 5 FT TOT LG
	8	1	2014648-008	WIRE PER 1010789-015, 26 AWG, YEL, RED, YEL JKT, 20 FT TOT LG
	9	1	2014648-009	WIRE PER 1010789-024, 26 AWG, BLK, 5 FT TOT LG
	10	1	2014648-010	WIRE PER JG-W-343, TYPE C, CLASS C, 22 AWG, 30 FT TOT LG
	11	1	2014648-011	WIRE PER 1010789-002, 24 AWG, BLK, 5 FT TOT LG
	12	1	2014748-011	CONNECTOR, PLUG, ELECTRICAL, (56P27)
9	13	1	1010929-003	CONNECTOR, PLUG, ELECTRICAL, (56P25)
9	14	1	1010921- 1	CONNECTOR, PLUG, ELECTRICAL, (56P30)

SIZE	CODE IDENT NO.	
A	80230	2014648 ~~2014684~~

SCALE-NONE | REV LTR G | SHEET 6 OF 28

SEE NOTE

LIST OF MATERIALS

NUMBER	ITEM	QTY	PART NO.	DESCRIPTION
9	15	1	1010921- 2	CONNECTOR, PLUG, ELECTRICAL, (56P31)
9	16	1	1010930-003	CONNECTOR, RECEPTACLE, ELECTRICAL (56J5)
9	18	36	1010932- 2	CONTACT, PIN
9	19	X	1010770- 2	CONTACT, SOCKET, SUPPLIED WITH CONNECTORS 1010771, AND 1010930
9	20	56	1010955- 1	CONTACT, MALE
9	21	8	1010955- 2	CONTACT, MALE
	22	2	2014670- 11	ADAPTER, CONNECTOR
9	23	10	1010983- 1	PLUG, PROTECTIVE SEALING
9	24	28	1010958- 1	PLUG, PROTECTIVE SEALING
	25	1	2014757-011	POWER FILTER ASSEMBLY
9	29	AR	1010989	TAPE, SHIELDING, EMI/RFI
9	30	AR	1006776- 19	INSULATION SLEEVING
	32	AR	MIL-T-23594	TAPE, TEFLON, TYPE II, 1 INCH WIDE
	33	AR	MIL-T-23594	TAPE, TEFLON, TYPE II, 1/4 INCH WIDE
9	34	AR	1012503	COMPOUND, POTTING, POLYURETHANE
9	35	AR	1012504	PRIMER, METAL PARTS
9	36	AR	1006277	SILICA, PULVERIZED, PYROGENIC
9	37	AR	1008822	COLORANT, EPOXY BASE

SIZE	CODE IDENT NO.	
A	80230	2014648 ~~2014684~~

SCALE-NONE | REV LTR G | SHEET 7 OF 28

MIL 2084 9-65

SEE NOTE

LIST OF MATERIALS

NUMBER	ITEM	QTY	PART NO.	DESCRIPTION
9	38	AR	1010661	EPOXY RESIN
9	39	AR	1010679	ADHESIVE ACTIVATOR
9	40	AR	1012507-004	TAPE, LACING AND TYING
9	42	7	1010945- 4	SPLICE REDUCER
9	43	1	1010945- 6	SPLICE REDUCER
	44	6	1006710-001	SPLICE
9	45	6	1012534- 92	INSULATION SLEEVING (HEAT SHRINKABLE)
9	46	7	1012534-112	INSULATION SLEEVING (HEAT SHRINKABLE)
9	47	1	1012534-122	INSULATION SLEEVING (HEAT SHRINKABLE)
	48	AR	QQ-S-571 SN60 WRAP 2	SOLDER
	49	AR	MIL-F-14256	FLUX
	50	4	MS17182-1	TERMINAL LUG
	51	4	MS35333-69	WASHER, LOCK
9	52	4	1006783- 93	SCREW, BUTTON HD
9	53	14	1010402- 2	SLEEVE, SOLDER
	54	1	MS35335-57	WASHER, LOCK
	55	1	MS25036-52	TERMINAL LUG
9	56	1	1006783- 18	SCREW, BUTTON HD

SIZE	CODE IDENT NO.	
A	80230	2014648 ~~2014684~~

SCALE-NONE | REV LTR F | SHEET 8 OF 28

MIL 2084 9-65

SEE NOTE

LIST OF MATERIALS

NUMBER	ITEM	QTY	PART NO.	DESCRIPTION
	57	1	2014648-012	WIRE BRAID, QQ-B-575, .12 DIA, 36 AWG, 10 FT TOTAL LENGTH
	58	1	1010630-14	SCREW, FLAT HD

SIZE	CODE IDENT NO.	
A	80230	2014648 ~~2014684~~

SCALE-NONE | REV LTR F | SHEET 9 OF 28

MIL 2084 9-65

LEAD IDENT	WIRE MATL ITEM	LEAD LG	CIRCUIT PT FROM (A) TO (B)	TERM. AREA NO.	JKT STRIP LG	SHLD STRIP LG	LEAD CUT LG	INS STRIP LG	TIN	NOTE ONE, FIG	ACCESSORY ITEMS	REMARKS
H 1	1		P30-9					.13	NO		18	
			E21					.44	NO			LARGE END
H 2	1		P30-10					.13	NO		18	
			E21					.44	NO			LARGE END
H 3	2		P27-A6					.18	NO		20	
			E22					.63	NO			END A
H 4	2		P27-A7					.18	NO		20	
			E22					.63	NO			END A
H 5	2		P27-B6					.18	NO		20	
			E22					.63	NO			END A
H 6	2		P27-B7					.18	NO		20	
			E22					.63	NO			END A
H 7	2		P27-C6					.18	NO		20	
			E22					.63	NO			END A
H 8	2		P27-C7					.18	NO		20	
			E22					.63	NO			END A
H 9	2		P27-D6					.18	NO		20	
			E22					.63	NO			END A
H 10	1		P31-9					.13	NO		18	
			E23					.44	NO			LARGE END
H 11	1		P31-10					.13	NO		18	
			E23					.44	NO			LARGE END
H 12	2		P27-A3					.18	NO		20	
			E24					.37	NO			END A

SIZE	CODE IDENT NO.	
A	80230	2014648 ~~2014684~~

SCALE-NONE | REV LTR F | SHEET 10 OF 28

MIL 2084 9-65

LEAD IDENT	WIRE MATL ITEM	LEAD LG	CIRCUIT PT FROM (A) TO (B)	TERM. AREA NO.	JKT STRIP LG	SHLD STRIP LG	LEAD CUT LG	INS STRIP LG	TIN	NOTE ONE, FIG	ACCESSORY ITEMS	REMARKS
H 13	2		P27-A4					.18	NO		20	
			E24					.37	NO			END A
H 14	2		P27-A5					.18	NO		20	
			E24					.37	NO			END A
H 15	2		P27-B4					.18	NO		20	
			E24					.37	NO			END A
H 16	2		P27-B5					.18	NO		20	
			E24					.37	NO			END A
H 17	2		P27-C4					.18	NO		20	
			E24					.37	NO			END A
H 18	2		P27-C5					.18	NO		20	
			E24					.37	NO			END A
H 19	1		P30-8					.13	NO		18	
			TB1-11					.25	YES			
H 20	2		P27-F7					.18	NO		20	
			TB1-11					.25	YES			
H 21	2		P27-G7					.18	NO		20	
			TB1-11					.25	YES			
H 22	2		P27-H7					.18	NO		20	
			TB1-11					.25	YES			
H 23	1		P31-8					.13	NO		18	
			TB1-12					.25	YES			
H 24	2		P27-F8					.18	NO		20	
			TB1-12					.25	YES			

SIZE	CODE IDENT NO.	
A	80230	2014648 ~~2014684~~

SCALE-NONE | REV LTR F | SHEET 11 OF 28

MIL 2084 9-65

LEAD IDENT	WIRE MATL ITEM	LEAD LG	CIRCUIT PT FROM (A) TO (B)	TERM. AREA NO.	JKT STRIP LG	SHLD STRIP LG	LEAD CUT LG	INS STRIP LG	TIN	NOTE ONE, FIG	ACCESSORY ITEMS	REMARKS
H 25	2		P27-G8					.18	NO		20	
			TB1-12					.25	YES			
H 26	2		P27-H8					.18	NO		20	
			TB1-12					.25	YES			
H 27	1		P30-3					.13	NO		18	
			E25					.44	NO			LARGE END
H 28	1		P30-15					.13	NO		18	
			E25					.44	NO			LARGE END
H 29	1		P30-16					.13	NO		18	
			E26					.53	NO			SMALL END
H 30	1		P31-3					.13	NO		18	
			E26					.53	NO			SMALL END
H 31	1		P31-15					.13	NO		18	
			E27					.44	NO			LARGE END
H 32	1		P31-16					.13	NO		18	
			E27					.44	NO			LARGE END
H 33	2		P27-B8					.18	NO		20	
			E28					.63	NO			SMALL END
H 34	2		P27-B9					.18	NO		20	
			E28					.63	NO			SMALL END
H 35	2		P27-C8					.18	NO		20	
			E28					.63	NO			SMALL END
H 36	2		P27-C9					.18	NO		20	
			E28					.63	NO			SMALL END

SIZE	CODE IDENT NO.	
A	80230	2014648 ~~2014684~~

SCALE-NONE | REV LTR F | SHEET 12 OF 28

MIL 2084 9-65

LEAD IDENT	WIRE MATL ITEM	LEAD LG	CIRCUIT PT FROM (A) TO (B)	TERM. AREA NO.	JKT STRIP LG	SHLD STRIP LG	LEAD CUT LG	INS STRIP LG	TIN	NOTE ONE, FIG	ACCESSORY ITEMS	REMARKS
H 37	2		P27-D7					.18	NO		20	
			E28					.63	NO			SMALL END
H 38	2		P27-D8					.18	NO		20	
			E29					.37	NO			END A
H 39	2		P27-D9					.18	NO		20	
			E29					.37	NO			END A
H 40	2		P27-F9					.18	NO		20	
			E29					.37	NO			END A
H 41	2		P27-G9					.18	NO		20	
			E29					.37	NO			END A
H 42	2		P27-H9					.18	NO		20	
			E29					.37	NO			END A
H 43	1		P30-7					.13	NO		18	
			TB1-1					.25	YES			
H 44	1		P31-7					.13	NO		18	
			TB1-2					.25	YES			
H 45	1		P30-14					.13	NO		18	
			E30					.44	NO			LARGE END
H 46	1		P31-14					.13	NO		18	
			E30					.44	NO			LARGE END
H 47	6											
H 47G			P27-B3					.18	NO		20	
			TB1-1					.25	YES			

SIZE	CODE IDENT NO.	
A	80230	2014648 ~~2014684~~

SCALE-NONE | REV LTR F | SHEET 13 OF 28

MIL 2084 9-65

WIRING HARNESS H ~~2014684~~ F

LEAD IDENT	WIRE MATL ITEM	LEAD LG	CIRCUIT PT FROM (A) TO (B)	TERM. AREA NO.	JKT STRIP LG	SHLD STRIP LG	LEAD CUT LG	INS STRIP LG	TIN	NOTE ONE, FIG	ACCESSORY ITEMS	REMARKS
H 47R			P27-B2					.18	NO		20	
			TB1-2					.25	YES			
H 47Y			P27-B1					.18	NO		20	
			TB1-6					.25	YES			
H 48	6											
H 48G			P27-C3					.18	NO		20	
			TB1-1					.25	YES			
H 48R			P27-C2					.18	NO		20	
			TB1-2					.25	YES			
H 48Y			P27-C1					.18	NO		20	
			TB1-6					.25	YES			
H 49	6											
H 49G			P27-D3					.18	NO		20	
			TB1-1					.25	YES			
H 49R			P27-D2					.18	NO		20	
			TB1-2					.25	YES			
H 49Y			P27-D1					.18	NO		20	
			TB1-6					.25	YES			
H 50	6											
H 50G			P27-F3					.18	NO		20	
			TB1-1					.25	YES			

SIZE	CODE IDENT NO.	
A	80230	2014648 ~~2014684~~
SCALE-NONE	REV LTR F	SHEET 14 OF 28

MIL 2084 9-65

WIRING HARNESS H ~~2014684~~ F G

LEAD IDENT	WIRE MATL ITEM	LEAD LG	CIRCUIT PT FROM (A) TO (B)	TERM. AREA NO.	JKT STRIP LG	SHLD STRIP LG	LEAD CUT LG	INS STRIP LG	TIN	NOTE ONE, FIG	ACCESSORY ITEMS	REMARKS
H 50R			P27-F2					.18	NO		20	
			TB1-2					.25	YES			
H 50Y			P27-F1					.18	NO		20	
			TB1-6					.25	YES			
H 51	1		P30-2					.13	NO		18	
			TB1-7					.25	YES			
H 52	1		P31-2					.13	NO		18	
			TB1-8					.25	YES			
H 53	1		P30-1					.13	NO		18	
			E33					.44	NO			LARGE END
H 54	1		P31-1					.13	NO		18	
			E33					.44	NO			LARGE END
H 55	6											A
H 55G			J5-53					.13	NO		19	A
			E31					.37	NO			END A
H 55R			J5-78					.13	NO		19	A
			E32					.37	NO			END A
H 55Y			J5-54					.13	NO		19	A
			E34					.37	NO			END A
H 56	6											A
H 56G			J5-79					.13	NO		19	A
			E31					.37	NO			END A

SIZE	CODE IDENT NO.	
A	80230	2014648 ~~2014684~~
SCALE-NONE	REV LTR F G	SHEET 15 OF 28

MIL 2084 9-65

WIRING HARNESS H ~~2014684~~ F G

LEAD IDENT	WIRE MATL ITEM	LEAD LG	CIRCUIT PT FROM (A) TO (B)	TERM. AREA NO.	JKT STRIP LG	SHLD STRIP LG	LEAD CUT LG	INS STRIP LG	TIN	NOTE ONE, FIG	ACCESSORY ITEMS	REMARKS
H 56R			J5-80					.13	NO		19	A
			E32					.37	NO			END A
H 56Y			J5-55					.13	NO		19	A
			E34					.37	NO			END A
H 57	6											A
H 57G			J5-33					.13	NO		19	A
			E31					.37	NO			END A
H 57R			J5-32					.13	NO		19	A
			E32					.37	NO			END A
H 57Y			J5-16					.13	NO		19	A
			E34					.37	NO			END A
H 58	6											A
H 58G			J5-81					.13	NO		19	A
			E31					.37	NO			END A
H 58R			J5-57					.13	NO		19	A
			E32					.37	NO			END A
H 58Y			J5-56					.13	NO		19	A
			E34					.37	NO			END A
H 59	6											A
H 59G			J5-58					.13	NO		19	A
			E31					.37	NO			END A

SIZE	CODE IDENT NO.	
A	80230	2014648 ~~2014684~~
SCALE-NONE	REV LTR F G	SHEET 16 OF 28

MIL 2084 9-65

WIRING HARNESS H ~~2014684~~ F

LEAD IDENT	WIRE MATL ITEM	LEAD LG	CIRCUIT PT FROM (A) TO (B)	TERM. AREA NO.	JKT STRIP LG	SHLD STRIP LG	LEAD CUT LG	INS STRIP LG	TIN	NOTE ONE, FIG	ACCESSORY ITEMS	REMARKS
H 59R			J5-34					.13	NO		19	A
			E32					.37	NO			END A
H 59Y			J5-35					.13	NO		19	A
			E34					.37	NO			END A
H 61	1		P30-4					.13	NO		18	
			TB1-10					.25	YES			
H 62	1		P31-4					.13	NO		18	
			TB1-10					.25	YES			
H 63R	1		P30-17					.13	NO		18	
			TB1-13					.25	YES			
H 63Y	1		P30-18					.13	NO		18	
			TB1-14					.25	YES			
H 67	5											
H 67R			P25-83					.13	NO		19	
			P27-K5					.18	NO		21	
H 67Y			P25-84					.13	NO		19	
			P27-K4					.18	NO		21	
H 68	7											
H 68G			P25-55					.13	NO		19	
			P27-H4					.22	NO			
H 68N			P25-53					.13	NO		19	
			P27-H4					.22	NO		20	

SIZE	CODE IDENT NO.	
A	80230	2014648 ~~2014684~~
SCALE-NONE	REV LTR F	SHEET 17 OF 28

MIL 2084 9-65

WIRING HARNESS H ~~2014684~~ G

LEAD IDENT	WIRE MATL ITEM	LEAD LG	CIRCUIT PT FROM (A) TO (B)	TERM. AREA NO.	JKT STRIP LG	SHLD STRIP LG	LEAD CUT LG	INS STRIP LG	TIN	NOTE ONE, FIG	ACCESSORY ITEMS	REMARKS
H 68R			P25-31					.13	NO		19	
			P27-H5					.18	NO		21	
H 68Y			P25-54					.13	NO		19	
			P27-G5					.18	NO		21	
H 69	2		P25-57					.13	NO		19	
			P27-G4					.18	NO		20	
H 70	3		J5-62					.13	NO		19	B
			P25-51					.13	NO		19	
H 71	3		J5-63					.13	NO		19	B
			P25-78					.13	NO		19	
H 72	3		J5-38					.13	NO		19	B
			P25-77					.13	NO		19	
H 73	3		J5-40					.13	NO		19	B
			P25-76					.13	NO		19	
H 74	3		J5-39					.13	NO		19	B
			P25-79					.13	NO		19	
H 75	3		J5-64					.13	NO		19	B
			P25-49					.13	NO		19	
H 76	2		J5-66					.13	NO		19	B
			P25-30					.13	NO		19	
H 77	3		J5-65					.13	NO		19	B
			P25-75					.13	NO		19	
H 78	2		J5-41					.13	NO		19	B
			P25-28					.13	NO		19	

SIZE	CODE IDENT NO.	
A	80230	2014648 ~~2014684~~
SCALE-NONE	REV LTR F	SHEET 18 OF 28

MIL 2084 9-65

WIRING HARNESS H ~~2014684~~ F

LEAD IDENT	WIRE MATL ITEM	LEAD LG	CIRCUIT PT FROM (A) TO (B)	TERM. AREA NO.	JKT STRIP LG	SHLD STRIP LG	LEAD CUT LG	INS STRIP LG	TIN	NOTE ONE, FIG	ACCESSORY ITEMS	REMARKS
H 79	2		J5-42					.13	NO		19	B
			P25-48					.13	NO		19	
H 80	3		J5-52					.13	NO		19	B
			P25-2					.13	NO		19	
H 81	3		J5-76					.13	NO		19	B
			P25-9					.13	NO		19	
H 82	3		J5-30					.13	NO		19	B
			P25-22					.13	NO		19	
H 83	3		J5-29					.13	NO		19	B
			P25-41					.13	NO		19	
H 84	3		J5-14					.13	NO		19	B
			P25-66					.13	NO		19	
H 85	3		J5-50					.13	NO		19	B
			P25-3					.13	NO		19	
H 86	3		J5-74					.13	NO		19	B
			P25-10					.13	NO		19	
H 87	3		J5-75					.13	NO		19	B
			P25-23					.13	NO		19	
H 88	3		J5-51					.13	NO		19	B
			P25-42					.13	NO		19	
H 89	3		J5-77					.13	NO		19	B
			P25-67					.13	NO		19	
H 90	3		J5-27					.13	NO		19	B
			P25-12					.13	NO		19	

SIZE	CODE IDENT NO.	
A	80230	2014648 ~~2014684~~
SCALE-NONE	REV LTR F	SHEET 19 OF 28

MIL 2084 9-65

WIRING HARNESS H ~~2014684~~ F

LEAD IDENT	WIRE MATL ITEM	LEAD LG	CIRCUIT PT FROM (A) TO (B)	TERM. AREA NO.	JKT STRIP LG	SHLD STRIP LG	LEAD CUT LG	INS STRIP LG	TIN	NOTE ONE, FIG	ACCESSORY ITEMS	REMARKS
H 91	3		J5-13					.13	NO		19	B
			P25-11					.13	NO		19	
H 92	3		J5-28					.13	NO		19	B
			P25-24					.13	NO		19	
H 93	3		J5-73					.13	NO		19	B
			P25-43					.13	NO		19	
H 94	3		J5-49					.13	NO		19	B
			P25-68					.13	NO		19	
H 95	2		J5-45					.13	NO		19	B
			P25-7					.13	NO		19	
H 96	3		J5-72					.13	NO		19	B
			P25-27					.13	NO		19	
H 97	3		J5-48					.13	NO		19	B
			P25-45					.13	NO		19	
H 98	3		J5-47					.13	NO		19	B
			P25-26					.13	NO		19	
H 99	3		J5-71					.13	NO		19	B
			P25-25					.13	NO		19	
H 100	3		J5-4					.13	NO		19	B
			P25-47					.13	NO		19	
H 101	3		J5-22					.13	NO		19	B
			P25-70					.13	NO		19	
H 102	3		J5-46					.13	NO		19	B
			P25-46					.13	NO		19	

SIZE	CODE IDENT NO.	
A	80230	2014648 ~~2014684~~
SCALE-NONE	REV LTR F	SHEET 20 OF 28

MIL 2084 9-65

WIRING HARNESS H ~~2014684~~ F

LEAD IDENT	WIRE MATL ITEM	LEAD LG	CIRCUIT PT FROM (A) TO (B)	TERM. AREA NO.	JKT STRIP LG	SHLD STRIP LG	LEAD CUT LG	INS STRIP LG	TIN	NOTE ONE, FIG	ACCESSORY ITEMS	REMARKS
H 103	2		J5-70					.13	NO		19	B
			P25-73					.13	NO		19	
H 104	3		J5-25					.13	NO		19	B
			P25-13					.13	NO		19	
H 105	3		J5-26					.13	NO		19	B
			P25-72					.13	NO		19	
H 106	3		J5-11					.13	NO		19	B
			P25-74					.13	NO		19	
H 107	3		J5-23					.13	NO		19	B
			P25-44					.13	NO		19	
H 108	3		J5-12					.13	NO		19	B
			P25-71					.13	NO		19	
H 109	3		J5-10					.13	NO		19	B
			P25-69					.13	NO		19	
H 110	3		J5-24					.13	NO		19	B
			P25-18					.13	NO		19	
H 111	2		J5-44					.13	NO		19	B
			P25-21					.13	NO		19	
H 112	2		J5-68					.13	NO		19	B
			P25-8					.13	NO		19	
H 113	2		J5-43					.13	NO		19	B
			P25-1					.13	NO		19	
H 120	2		P27-G3					.18	NO		20	
			T81-15					.25	YES			

SIZE	CODE IDENT NO.	
A	80230	2014648 ~~2014684~~
SCALE-NONE	REV LTR F	SHEET 21 OF 28

MIL 2084 9-65

LEAD IDENT	WIRE MATL ITEM	LEAD LG	CIRCUIT PT FROM (A) TO (B)	TERM. AREA NO.	JKT STRIP LG	SHLD STRIP LG	LEAD CUT LG	INS STRIP LG	TIN	NOTE ONE, FIG	ACCESSORY ITEMS	REMARKS
H 121	2		P27-F4					.18	NO		20	
			TB1-16					.25	YES			
H 122	1		P30-6					.13	NO		18	
			TB1-15					.25	YES			
H 123	1		P31-6					.13	NO		18	
			TB1-16					.25	YES			
H 128	6											A
H 128G			J5-31					.13	NO		19	A
			E31					.37	NO			END A
H 128R			J5-15					.13	NO		19	A
			E32					.37	NO			END A
H 128Y			J5-5					.13	NO		19	A
			E34					.37	NO			END A
H 129	5											
H 129R			P25-15					.13	NO		19	
			P27-F6					.18	NO		21	
H 129Y			P25-32					.13	NO		19	
			P27-G6					.18	NO		21	
H 130	4											
H 130R			J5-60					.13	NO		19	
			TB1-10					.25	YES			

SIZE	CODE IDENT NO.		
A	80230	2014648 ~~2014684~~	
SCALE-NONE	REV LTR F G	SHEET 22 OF 28	

MIL 2084 9-65

LEAD IDENT	WIRE MATL ITEM	LEAD LG	CIRCUIT PT FROM (A) TO (B)	TERM. AREA NO.	JKT STRIP LG	SHLD STRIP LG	LEAD CUT LG	INS STRIP LG	TIN	NOTE ONE, FIG	ACCESSORY ITEMS	REMARKS
H 130Y			J5-84					.13	NO		19	
			TB1-10					.25	YES			
H 131	8				1.00	.75				6B	53	
					1.75	1.50				6B	53	
H 131A	11		SHLD H131					.20	NO			
			P27-H2					.18	NO		20	
H 131B	11		TB1-15					.25	YES			
			SHLD H131					.20	NO			
H 131R			P27-K3					.18	NO		21	
			TB1-13					.25	YES			
H 131Y			P27-H3					.18	NO		21	
			TB1-14					.25	YES			
H 132	8				1.00	.75				6B	53	
					1.75	1.50				6B	53	
H 132A	11		SHLD H132					.20	NO			
			E16					.19	NO			
H 132B	9		P27-H6					.22	NO			
			SHLD H132					.20	NO			
H 132R			J5-19					.13	NO		19	
			P27-K6					.22	NO			
H 132Y			J5-18					.13	NO		19	
			P27-K7					.22	NO			
H 133	8				1.00	.75				6B	53	
					1.75	1.50				6B	53	

SIZE	CODE IDENT NO.		
A	80230	2014648 ~~2014684~~	
SCALE-NONE	REV LTR F	SHEET 23 OF 28	

MIL 2084 9-65

LEAD IDENT	WIRE MATL ITEM	LEAD LG	CIRCUIT PT FROM (A) TO (B)	TERM. AREA NO.	JKT STRIP LG	SHLD STRIP LG	LEAD CUT LG	INS STRIP LG	TIN	NOTE ONE, FIG	ACCESSORY ITEMS	REMARKS
H 133A	11		SHLD H133					.20	NO			
			E17					.19	NO			
H 133B	9		P27-H6					.22	NO		20	
			SHLD H133					.20	NO			
H 133R			P25-38					.13	NO		19	
			P27-K6					.22	NO		20	
H 133Y			P25-40					.13	NO		19	
			P27-K7					.22	NO		20	
H 134	8				1.00	.75				6B	53	
					1.75	1.50				6B	53	
H 134A	11		SHLD H134					.20	NO			
			E16					.19	NO			
H 134B	11		E17					.19	NO		50	
			SHLD H134					.20	NO			
H 134R			J5-7					.13	NO		19	
			P25-5					.13	NO		19	
H 134Y			J5-8					.13	NO		19	
			P25-4					.13	NO		19	
H 135	4									6B	53	SEE NOTE [redacted] 29
										6B	53	
H 135A	11		SHLD H135					.20	NO			
			E17					.19	NO		50	
H 135B	11		TB1-~~TB1~~ 16					.25	~~NO~~ YES			
			~~TB1-16~~ SHLD H135					.20	~~.29 YES~~ NO			

SIZE	CODE IDENT NO.		
A	80230	2014648 ~~2014684~~	
SCALE-NONE	REV LTR F G	SHEET 24 OF 28	

MIL 2084 9-65

LEAD IDENT	WIRE MATL ITEM	LEAD LG	CIRCUIT PT FROM (A) TO (B)	TERM. AREA NO.	JKT STRIP LG	SHLD STRIP LG	LEAD CUT LG	INS STRIP LG	TIN	NOTE ONE, FIG	ACCESSORY ITEMS	REMARKS
H 135R			P25-62					.13	NO		19	
			TB1-17					.25	YES			
H 135Y			P25-63					.13	NO		19	
			TB1-18					.25	YES			
H 136	4									6B	53	SEE NOTE [redacted] 29
										6B	53	
H 136A	11		SHLD H136					.20	NO			
			E18					.19	NO			
H 136B	11		TB1-~~TB1~~ 16					.25	~~NO~~ YES			
			~~TB1-16~~ SHLD H136					.20	~~.29 YES~~ NO			
H 136R			P25-64					.13	NO		19	
			TB1-17					.25	YES			
H 136Y			P25-65					.13	NO		19	
			TB1-18					.25	YES			
H 137	4									6B	53	SEE NOTE [redacted] 29
										6B	53	
H 137A	11		SHLD H137					.20	NO			
			E16					.19	NO		50	
H 137B	11		TB1-~~TB1~~ 16					.25	~~NO~~ YES			
			~~TB1-16~~ SHLD H137					.20	~~.29 YES~~ NO			
H 137R			J5-9					.13	NO		19	
			TB1-17					.25	YES			
H 137Y			J5-2					.13	NO		19	
			TB1-18					.25	YES			

SIZE	CODE IDENT NO.		
A	80230	2014648 ~~2014684~~	
SCALE-NONE	REV LTR F G	SHEET 25 OF 28	

MIL 2084 9-65

LEAD IDENT	WIRE MATL ITEM	LEAD LG	CIRCUIT PT FROM (A) TO (B)	TERM. AREA NO.	JKT STRIP LG	SHLD STRIP LG	LEAD CUT LG	INS STRIP LG	TIN	NOTE ONE, FIG	ACCESSORY ITEMS	REMARKS
H 138	10		E20					.19	NO		55	A
			E15					.19	NO			
H 139	10		E15					.19	NO		50	B
			E18					.19	NO			
H 141	1		E21					.53	NO		42, 46	SMALL END
			TB1-3					.25	YES			
H 142	1		E22					.30	NO		44, 45	END B
			TB1-3					.25	YES			
H 143	1		E23					.53	NO		42, 46	SMALL END
			TB1-4					.25	YES			
H 144	1		E24					.30	NO		44, 45	END B
			TB1-4					.25	YES			
H 145	1		E25					.53	NO		42, 46	SMALL END
			E26					.50	NO			LARGE END
H 146	1		E26					.50	NO			LARGE END
			E27					.53	NO		42, 46	SMALL END
H 147	1		E26					.50	NO		43, 47	LARGE END
			TB1-5					.25	YES			
H 148	1		E28					.44	NO			LARGE END
			E29					.30	NO		44, 45	END B
H 149	1		E28					.44	NO		42, 46	LARGE END
			TB1-5					.25	YES			
H 150	1		E30					.53	NO		42, 46	SMALL END
			TB1-6					.25	YES			

SIZE	CODE IDENT NO.	
A	80230	2014648 ~~2014684~~
SCALE-NONE	REV LTR F	SHEET 26 OF 28

MIL 2084 9-65

LEAD IDENT	WIRE MATL ITEM	LEAD LG	CIRCUIT PT FROM (A) TO (B)	TERM. AREA NO.	JKT STRIP LG	SHLD STRIP LG	LEAD CUT LG	INS STRIP LG	TIN	NOTE ONE, FIG	ACCESSORY ITEMS	REMARKS
H 151	1		E31					.30	NO		44, 45	END B
			TB1-7					.25	YES			
H 152	1		E32					.30	NO		44, 45	END B
			TB1-8					.25	YES			
H 153	1		E33					.53	NO		42, 46	SMALL END
			TB1-9					.25	YES			
H 154	1		E34					.30	NO		44, 45	END B
			TB1-9					.25	YES			

SIZE	CODE IDENT NO.	
A	80230	2014648 ~~2014684~~
SCALE-NONE	REV LTR F	SHEET 27 OF 28

MIL 2084 9-65

CONFIGURATION INCOMPLETE

SIZE	CODE IDENT. NO.	
A	80230	2014648
SCALE NONE	REV LTR F	SHEET 28 of 28

MIL 2084 8-65

APPLICATION		REVISIONS			
NEXT ASSY	USED ON	SYM	DESCRIPTION	DATE	APPROVAL
		F	REPLACES REV(E) WITH CHANGE PER TDRR		
		G	CHANGED PER TDRR 24813		
		H	Revised per TDRR 25306	2-4-66	
		J	REVISED PER TDRR 25887	11 FEB 66	

REPLACES REV E WITH CHANGE

REV	J	J	J	J	J	J	J	J	J	J	J														
SHEET	21	22	23	24	25	26	27	28	29	30	31	32													
REV STATUS	REV						J	J	J	J	J	J	J	J	J	J	J	J	J	J	J	J	J	J	J
OF SHEETS	SHEET						1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16	17	18	19	20	21

AC ELECTRONICS DIVISION
GENERAL MOTORS CORP. MILWAUKEE WIS.

MANNED
SPACECRAFT CENTER
HOUSTON, TEXAS

DRAWN R. Rohr DATE 9 DEC '65
CHECKED W. Diehl 9 DEC. 65
APPROVAL E. THEIRSON 10 DEC. 65
APPROVAL J. J. Kerns DEC 20 65

G & N INTERCONNECT HARNESS "H"

(C/M, BLOCK II)

NASA APPROVAL A. C. MEITZLER
MIT APPROVAL W. Cuffer 21 Dec 65

CODE IDENT NO.	SIZE		REV
80230	A	2014648	J

CONTRACT NAS9-497 SCALE SHEET 1 OF 32

NOTE NUMBER	GENERAL NOTES DESCRIPTION
1	SHIELD TERMINATION FIGURES ARE PER ND1002071 FOR FIGURE 6B AND ND 1002032 FOR FIGURE 7.
2	INTERPRET DRAWING IN ACCORDANCE WITH STANDARDS PRESCRIBED BY MIL-D-70327.
3	INTERCONNECT LIST FOR THIS HARNESS IS 2014678.
4	PARTIAL CIRCUIT POINTS ARE SHOWN. PREFIX WITH UNIT NUMBER 56 FOR COMPLETE CIRCUIT POINT
5	THE SUFFIX LETTER OF A CONDUCTOR IDENTIFICATION NUMBER IDENTIFIES A SHIELD LEAD, COLOR, OR MARKED LETTER. A - FROM END OF SHIELD B - TO END OF SHIELD G - GREEN K - BLACK L - BLUE N - BROWN R - RED W - WHITE Y - YELLOW
6	ASTERISK DENOTES LOWER CASE LETTER
7	GRID MODULE ON PICTURE SHEET IS 1 INCH TRUE POSITION
8	UNLESS OTHERWISE SPECIFIED FEATURE CENTERLINES ON PICTURE SHEET ARE LOCATED WITHIN + OR - .25. ENDS OF HOOKUP WIRES OR ACCESSORIES ARE LOCATED WITHIN .12.
9	VENDOR ITEM - SEE SOURCE CONTROL OR SPECIFICATION CONTROL DRAWING.
10	CRIMP CONTACTS PER ND1002032.

SIZE	CODE IDENT NO.		
A	80230	2014648	
SCALE-NONE	REV LTR J	SHEET 2 OF 32	

NOTE NUMBER	GENERAL NOTES DESCRIPTION
11	ALL UNUSED CONTACT CAVITIES SHALL BE FILLED WITH A CONTACT OR CONTACT AND SEALING PLUG AS FOLLOWS CONNECTOR 56J5 AND P25 USE ITEM NUMBERS 19 AND 24. CONNECTOR 56P27, USE ITEM NUMBER 20. CONNECTOR 56P30, AND 31 USE ITEM NUMBERS 16 AND 23.
12	LACE HARNESS PER ND1002032 USING ITEM NUMBER 40.
13	A SMALL QUANTITY OF POTTING COMPOUND MUST BE PUT BETWEEN THE THREADED PORTION OF CONNECTOR AND SILICONE RUBBER GROMMET TO SEAL AND BOND RING TO CONNECTOR PRIOR TO POTTING.
14	ALL SHIELDED TERMINATIONS SHALL BE LOCATED BELOW REFERENCE LINE A. THERE SHALL BE NO EXPOSED CONDUCTORS AT THE SURFACE OF THE POTTING COMPOUND.
15	BEFORE LACING HARNESS, APPLY 2 TURNS OF TAPE TO INDICATE CABLE CLAMP LOCATION.
16	WRAP TAPE AROUND HARNESS IN AREA SHOWN AS REQUIRED TO BUILD UP DIAMETER TO FIT SHELL HOLE.
17	MARK CONNECTOR WITH REFERENCE DESIGNATION AS SHOWN .12 HIGH, BLACK, HOT IMPRESSION STAMPING PERND1002019, CENTRALIZE.
19	MARK CHARACTERS .12 HIGH, BLACK, PER ND1002019, SERIALIZE PER ND1002023.
20	CONTINUITY TEST PER CONDUCTOR CHART. RESISTANCE SHALL BE LESS THAN 1/2 OHM. TEST PER MIL-STD-202, METHOD 303.

SIZE	CODE IDENT NO.		
A	80230	2014648	
SCALE-NONE	REV LTR J	SHEET 3 OF 32	

NOTE NUMBER	GENERAL NOTES DESCRIPTION
21	A. INSULATION RESISTANCE SHALL BE GREATER THAN 100 MEGOHMS WITH 500 VDC APPLIED BETWEEN 1. THE ASSEMBLY PINS AND STRUCTURE GROUND, WITH THE EXCEPTION OF THOSE PINS ELECTRICALLY CONNECTED TO STRUCTURE GROUND AND THOSE PINS SPECIFIED IN PAR. 6. 2. EACH PIN AND ALL OTHER PINS NOT ELECTRICALLY CONNECTED, INCLUDING ALL SPARE PINS. B. INSULATION RESISTANCE SHALL BE GREATER THAN 100 MEGOHMS WITH 100 VDC APPLIED BETWEEN THE ASSEMBLY PINS ELECTRICALLY CONNECTED TO TB1-1 THRU TB1-12 AND STRUCTURE GROUND. TEST PER MIL-STD-202, METHOD 302, EXCEPT ELECTRIFICATION TIME NOT APPLICABLE.
22	PRESEAL BACK OF CONNECTOR P27 PRIOR TO ENCAPSULATION PER ND1002187 TYPE III USING ITEMS 36, 37, 38, AND 39.
23	ENCAPSULATE BACK OF CONNECTORS PER ND1002236 USING ITEMS 34 AND 35.
24	CONDUCTORS LISTED WITH AN A OR B IN THE REMARKS COLUMN ARE TO BE GROUP SHIELDED PER DETAILS A, B AND C OF THE CONFIGURATION DRAWING.
25	GROUP SHIELDING - THREAD ONE CONTINUOUS LENGTH OF GROUND WIRE, ITEM 10, THROUGH CENTER OF EMI/RFI SHIELDING TAPE, ITEM 29. ALLOW 6 INCHES OF GROUND WIRE TO EXTEND BEYOND ENDS OF SHIELDING TAPE. WRAP CABLE WITH ONE CONTINUOUS LENGTH OF PREPARED SHIELDING. SUCCESSIVE TURNS SHALL OVERLAP BY APPROXIMATELY 1/2 THE WIDTH OF THE TAPE, WITH A MINIMUM OF RIDGES AND FOLDS.
26	COMPLETELY COVER SHIELD WITH ONE CONTINUOUS WRAP OF INSULATION TAPE, ITEM 32. SUCCESSIVE TURNS SHALL OVERLAP BY APPROXIMATELY 1/2 THE WIDTH OF THE TAPE, WITH A MINIMUM OF RIDGES AND FOLDS. WRAP TAPE IN OPPOSITE DIRECTION TO SHIELD WRAP.

SIZE	CODE IDENT NO.		
A	80230	2014648	
SCALE-NONE	REV LTR J	SHEET 4 OF 32	

NOTE NUMBER	GENERAL NOTES DESCRIPTION
27	ASSEMBLE INSULATION TUBING, ITEM 30, OVER GROUND WIRE AS REQUIRED TO REACH TERMINATION. ASSEMBLE SHRINK SLEEVING AS SHOWN.
28	DELETED
29	DELETED
30	ASSEMBLE A LENGTH OF WIRE BRAID, ITEM 57, OVER CONDUCTORS H135, H136, AND H137. ALLOW 1.50 INCHES OF LEAD TO EXTEND BEYOND BRAID. COVER BRAID WITH TEFLON TAPE, ITEM 32, PER NOTE 26. ALLOW .25 INCH OF BRAID TO EXTEND BEYOND TAPE. FOLD BRAID OVER TAPE AND TERMINATE PER ND1002071, FIG. 6B.
31	DELETED
32	PERFORM WORKMANSHIP VIBRATION A. SINUSOIDAL SWEEP AT 3.5 G RMS. LIMITED TO 0.3 INCH PEAK TO PEAK DISPLACEMENT, FROM 10 TO 2000 CPS AT A RATE OF 4 OCTAVES PER MINUTE. B. VIBRATION ALONG THE X AXIS OF THE SPACE CRAFT. C. MONITOR FOR DISCONTINUITIES OF 10 MICRO SECONDS OR GREATER DURING VIBRATION. D. COMPLETE CONTINUITY AND INSULATION RESISTANCE TESTING MUST BE ACCOMPLISHED AFTER VIBRATION.

SIZE	CODE IDENT NO.		
A	80230	2014648	
SCALE-NONE	REV LTR J	SHEET 5 OF 32	

NOTE NUMBER — GENERAL NOTES

DESCRIPTION

LEAD TOLERANCE CHART

	LEAD LG	JKT STRIP LG	SHIELD STRIP LG	LEAD CUT LG	INS STRIP LG
UNDER 3 INCHES	+ .12-.00	+.06-.06	+.06-.06	+.06-.06	+.06-.00
3 INCH TO 3 FT	+ .50-.00	+.25-.25	+.25-.25	+.25-.25	
3 FT TO 10 FT	+1.00-.00				
10 FT AND OVER	+2.00-.00				

SEE NOTE — LIST OF MATERIALS

NUMBER	ITEM	QTY	PART NO.	DESCRIPTION
	1			DELETED
	2	1	2014648-002	WIRE PER 1010789-006, 22 AWG, YEL, 240 FT TOT LG
	3	1	2014648-003	WIRE PER 1010789-016, 26 AWG, YEL, 170 FT TOT LG
	4	1	2014648-004	WIRE PER 1010789-008, 22 AWG, YEL, RED, 10 FT TOT LG
	5	1	2014648-005	WIRE PER 1010789-017, 26 AWG, YEL, RED, 8 FT TOT LG
	6			DELETED
	7	1	2014648-007	WIRE PER 1010789-019, 26 AWG, YEL, RED, GRN, BRN, 5 FT TOT LG
	8	1	2014648-008	WIRE PER 1010789-015, 26 AWG, YEL, RED, YEL JKT, 20 FT TOT LG
	9	1	2014648-009	WIRE PER 1010789-024, 26 AWG, BLK, 5 FT TOT LG
	10	1	2014648-010	WIRE PER QQ-W-343, TYPE C, CLASS C, 22 AWG, 30 FT TOT LG
	11	1	2014648-011	WIRE PER 1010789-002, 24 AWG, BLK, 5 FT TOT LG
	12	1	2014748-011	CONNECTOR, PLUG, ELECTRICAL, (56P27)
9	13	1	1010929-003	CONNECTOR, PLUG, ELECTRICAL, (56P25)
9	14	1	1010921- 1	CONNECTOR, PLUG, ELECTRICAL, (56P30)

SEE NOTE — LIST OF MATERIALS

NUMBER	ITEM	QTY	PART NO.	DESCRIPTION
9	15	1	1010921- 2	CONNECTOR, PLUG, ELECTRICAL, (56P31)
9	16	1	1010930-003	CONNECTOR, RECEPTACLE, ELECTRICAL (56J5)
9	18	36	1010932- 2	CONTACT, PIN
9	19	X	1010770- 2	CONTACT, SOCKET, SUPPLIED WITH CONNECTORS 1010929, AND 1010930.
9	20	56	1010955- 1	CONTACT, MALE
9	21	8	1010955- 2	CONTACT, MALE
	22	2	2014670- 11	ADAPTER, CONNECTOR
9	23	7	1010983- 1	PLUG, PROTECTIVE SEALING
9	24	39	1010958- 1	PLUG, PROTECTIVE SEALING
	25			DELETED
9	29	AR	1010989	TAPE, SHIELDING, EMI/RFI
9	30	AR	1006776- 19	INSULATION SLEEVING
	32	AR	MIL-T-23594	TAPE, TEFLON, TYPE II, 1 INCH WIDE
	33	AR	MIL-T-23594	TAPE, TEFLON, TYPE II, 1/4 INCH WIDE
9	34	AR	1012503	COMPOUND, POTTING, POLYURETHANE
9	35	AR	1012504	PRIMER, METAL PARTS
9	36	AR	1006277	SILICA, PULVERIZED, PYROGENIC
9	37	AR	1008822	COLORANT, EPOXY BASE

SEE NOTE — LIST OF MATERIALS

NUMBER	ITEM	QTY	PART NO.	DESCRIPTION
9	38	AR	1010661	EPOXY RESIN
9	39	AR	1010679	ADHESIVE ACTIVATOR
9	40	AR	1012507-004	TAPE, LACING AND TYING
	42			DELETED
	43			DELETED
	44			DELETED
	45			DELETED
	46			DELETED
	47			DELETED
	48			DELETED
	49			DELETED
	50	4	MS17182-1	TERMINAL LUG
	51	4	MS35333-69	WASHER, LOCK
9	52	4	1006783- 93	SCREW, BUTTON HD
9	53	13	1010402- 2	SLEEVE, SOLDER
	54			DELETED
	55			DELETED
	56			DELETED

SEE NOTE

LIST OF MATERIALS

NUMBER	ITEM	QTY	PART NO.	DESCRIPTION
	57	1	2014648-012	WIRE BRAID, QQ-B-575, .12 DIA, 36 AWG, 10 FT TOTAL LENGTH
	58			DELETED
	59	1	1012534- 36	SLEEVING, INSULATION, ELEC, (HEAT SHRINKABLE)

SIZE	CODE IDENT NO.	
A	80230	2014648
SCALE-NONE	REV LTR J	SHEET 10 OF 32

LEAD IDENT	WIRE MATL ITEM	LEAD LG	CIRCUIT PT FROM (A) TO (B)	TERM.JKT AREA NO.	STRIP LG	SHLD STRIP LG	LEAD CUT LG	INS STRIP LG	TIN	NOTE ONE, FIG	ACCESSORY ITEMS	REMARKS
H	1		DELETED									
H	2		DELETED									
H	3	2	P27-A6 P30-9					.18 .13	NO NO		20	
H	4	2	P27-A7 P30-9					.18 .13	NO NO		20	
H	5	2	P27-B6 P30-9					.18 .13	NO NO		20	
H	6	2	P27-B7 P30-9					.18 .13	NO NO		20 18	
H	7	2	P27-C6 P30-10					.18 .13	NO NO		20	
H	8	2	P27-C7 P30-10					.18 .13	NO NO		20	
H	9	2	P27-D6 P30-10					.18 .13	NO NO		20 18	
H	10		DELETED									
H	11		DELETED									
H	12	2	P27-A3 P31-9					.18 .13	NO NO		20	

SIZE	CODE IDENT NO.	
A	80230	2014648
SCALE-NONE	REV LTR J	SHEET 11 OF 32

LEAD IDENT	WIRE MATL ITEM	LEAD LG	CIRCUIT PT FROM (A) TO (B)	TERM.JKT AREA NO.	STRIP LG	SHLD STRIP LG	LEAD CUT LG	INS STRIP LG	TIN	NOTE ONE, FIG	ACCESSORY ITEMS	REMARKS
H	13	2	P27-A4 P31-9					.18 .13	NO NO		20	
H	14	2	P27-A5 P31-9					.18 .13	NO NO		20	
H	15	2	P27-B4 P31-9					.18 .13	NO NO		20 18	
H	16	2	P27-B5 P31-10					.18 .13	NO. NO		20	
H	17	2	P27-C4 P31-10					.18 .13	NO NO		20	
H	18	2	P27-C5 P31-10					.18 .13	NO NO		20 18	
H	19		DELETED									
H	20	2	P27-F7 P30-8					.18 .13	NO NO		20	
H	21	2	P27-G7 P30-8					.18 .13	NO NO		20	
H	22	2	P27-H7 P30-8					.18 .13	NO NO		20 18	
H	23		DELETED									
H	24	2	P27-F8 P31-8					.18 .13	NO NO		20	

SIZE	CODE IDENT NO.	
A	80230	2014648
SCALE-NONE	REV LTR J	SHEET 12 OF 32

LEAD IDENT	WIRE MATL ITEM	LEAD LG	CIRCUIT PT FROM (A) TO (B)	TERM.JKT AREA NO.	STRIP LG	SHLD STRIP LG	LEAD CUT LG	INS STRIP LG	TIN	NOTE ONE, FIG	ACCESSORY ITEMS	REMARKS
H	25	2	P27-G8 P31-8					.18 .13	NO NO		20	
H	26	2	P27-H8 P31-8					.18 .13	NO NO		20 18	
H	27		DELETED									
H	28		DELETED									
H	29		DELETED									
H	30		DELETED									
H	31		DELETED									
H	32		DELETED									
H	33	2	P27-B8 P30-16					.18 .13	NO NO		20	
H	34	2	P27-B9 P31-16					.18 .13	NO NO		20	
H	35	2	P27-C8 P30-16					.18 .13	NO NO		20	
H	36	2	P27-C9 P31-16					.18 .13	NO NO		20	

SIZE	CODE IDENT NO.	
A	80230	2014648
SCALE-NONE	REV LTR J	SHEET 13 OF 32

LEAD IDENT	WIRE MATL ITEM	LEAD LG	CIRCUIT PT FROM (A) TO (B)	TERM.JKT AREA NO.	STRIP LG	SHLD STRIP LG	LEAD CUT LG	INS STRIP LG	TIN	NOTE ONE, FIG	ACCESSORY ITEMS	REMARKS
H 37	2		P27-D7 P31-15					.18 .13	NO NO		20	
H 38	2		P27-D8 P31-15					.18 .13	NO NO		20	
H 39	2		P27-D9 P30-15					.18 .13	NO NO		20	
H 40	2		P27-F9 P30-15					.18 .13	NO NO		20	
H 41	2		P27-G9 P30-3					.18 .13	NO NO		20	
H 42	2		P27-H9 P31-3					.18 .13	NO NO		20	
H 43			DELETED									
H 44			DELETED									
H 45			DELETED									
H 46			DELETED									
H 47			DELETED									
H 47G			DELETED									

LEAD IDENT	WIRE MATL ITEM	LEAD LG	CIRCUIT PT FROM (A) TO (B)	TERM.JKT AREA NO.	STRIP LG	SHLD STRIP LG	LEAD CUT LG	INS STRIP LG	TIN	NOTE ONE, FIG	ACCESSORY ITEMS	REMARKS
H 47R			DELETED									
H 47Y			DELETED									
H 48			DELETED									
H 48G			DELETED									
H 48R			DELETED									
H 48Y			DELETED									
H 49			DELETED									
H 49G			DELETED									
H 49R			DELETED									
H 49Y			DELETED									
H 50			DELETED									
H 50G			DELETED									

LEAD IDENT	WIRE MATL ITEM	LEAD LG	CIRCUIT PT FROM (A) TO (B)	TERM.JKT AREA NO.	STRIP LG	SHLD STRIP LG	LEAD CUT LG	INS STRIP LG	TIN	NOTE ONE, FIG	ACCESSORY ITEMS	REMARKS
H 50R			DELETED									
H 50Y			DELETED									
H 51			DELETED									
H 52			DELETED									
H 53			DELETED									
H 54			DELETED									
H 55			DELETED									
H 55G			DELETED									
H 55R			DELETED									
H 55Y			DELETED									
H 56			DELETED									
H 56G			DELETED									

LEAD IDENT	WIRE MATL ITEM	LEAD LG	CIRCUIT PT FROM (A) TO (B)	TERM.JKT AREA NO.	STRIP LG	SHLD STRIP LG	LEAD CUT LG	INS STRIP LG	TIN	NOTE ONE, FIG	ACCESSORY ITEMS	REMARKS
H 56R			DELETED									
H 56Y			DELETED									
H 57			DELETED									
H 57G			DELETED									
H 57R			DELETED									
H 57Y			DELETED									
H 58			DELETED									
H 58G			DELETED									
H 58R			DELETED									
H 58Y			DELETED									
H 59			DELETED									
H 59G			DELETED									

LEAD IDENT	WIRE MATL ITEM	LEAD LG	CIRCUIT PT FROM (A) TO (B)	TERM.JKT AREA NO.	STRIP LG	SHLD STRIP LG	LEAD CUT LG	INS STRIP LG	TIN	NOTE ONE, FIG	ACCESSORY ITEMS	REMARKS
H 59R			DELETED									
H 59Y			DELETED									
H 61			DELETED									
H 62			DELETED									
H 63R			DELETED									
H 63Y			DELETED									
H 67	5											
H 67R			P25-83					.13	NO		19	
			P27-K5					.18	NO		21	
H 67Y			P25-84					.13	NO		19	
			P27-K4					.18	NO		21	
H 68	7											
H 68G			P25-55					.13	NO		19	
			P27-H4					.22	NO			
H 68N			P25-53					.13	NO		19	
			P27-H4					.22	NO		20	

SIZE	CODE IDENT NO.	
A	80230	2014648
SCALE-NONE	REV LTR J	SHEET 18 OF 32

LEAD IDENT	WIRE MATL ITEM	LEAD LG	CIRCUIT PT FROM (A) TO (B)	TERM.JKT AREA NO.	STRIP LG	SHLD STRIP LG	LEAD CUT LG	INS STRIP LG	TIN	NOTE ONE, FIG	ACCESSORY ITEMS	REMARKS
H 68R			P25-31					.13	NO		19	
			P27-H5					.18	NO		21	
H 68Y			P25-54					.13	NO		19	
			P27-G5					.18	NO		21	
H 69	2		P25-57					.13	NO		19	
			P27-G4					.18	NO		20	
H 70	3		J5-62					.13	NO		19	B
			P25-51					.13	NO		19	
H 71	3		J5-63					.13	NO		19	B
			P25-78					.13	NO		19	
H 72	3		J5-38					.13	NO		19	B
			P25-77					.13	NO		19	
H 73	3		J5-40					.13	NO		19	B
			P25-76					.13	NO		19	
H 74	3		J5-39					.13	NO		19	B
			P25-79					.13	NO		19	
H 75	3		J5-64					.13	NO		19	B
			P25-49					.13	NO		19	
H 76	2		J5-66					.13	NO		19	B
			P25-30					.13	NO		19	
H 77	3		J5-65					.13	NO		19	B
			P25-75					.13	NO		19	
H 78	2		J5-41					.13	NO		19	B
			P25-28					.13	NO		19	

SIZE	CODE IDENT NO.	
A	80230	2014648
SCALE-NONE	REV LTR J	SHEET 19 OF 32

LEAD IDENT	WIRE MATL ITEM	LEAD LG	CIRCUIT PT FROM (A) TO (B)	TERM.JKT AREA NO.	STRIP LG	SHLD STRIP LG	LEAD CUT LG	INS STRIP LG	TIN	NOTE ONE, FIG	ACCESSORY ITEMS	REMARKS
H 79	2		J5-42					.13	NO		19	B
			P25-48					.13	NO		19	
H 80	3		J5-52					.13	NO		19	B
			P25-2					.13	NO		19	
H 81	3		J5-76					.13	NO		19	B
			P25-9					.13	NO		19	
H 82	3		J5-30					.13	NO		19	B
			P25-22					.13	NO		19	
H 83	3		J5-29					.13	NO		19	B
			P25-41					.13	NO		19	
H 84	3		J5-14					.13	NO		19	B
			P25-66					.13	NO		19	
H 85	3		J5-50					.13	NO		19	B
			P25-3					.13	NO		19	
H 86	3		J5-74					.13	NO		19	B
			P25-10					.13	NO		19	
H 87	3		J5-75					.13	NO		19	B
			P25-23					.13	NO		19	
H 88	3		J5-51					.13	NO		19	B
			P25-42					.13	NO		19	
H 89	3		J5-77					.13	NO		19	B
			P25-67					.13	NO		19	
H 90	3		J5-27					.13	NO		19	B
			P25-12					.13	NO		19	

SIZE	CODE IDENT NO.	
A	80230	2014648
SCALE-NONE	REV LTR J	SHEET 20 OF 32

LEAD IDENT	WIRE MATL ITEM	LEAD LG	CIRCUIT PT FROM (A) TO (B)	TERM.JKT AREA NO.	STRIP LG	SHLD STRIP LG	LEAD CUT LG	INS STRIP LG	TIN	NOTE ONE, FIG	ACCESSORY ITEMS	REMARKS
H 91	3		J5-13					.13	NO		19	B
			P25-11					.13	NO		19	
H 92	3		J5-28					.13	NO		19	B
			P25-24					.13	NO		19	
H 93	3		J5-73					.13	NO		19	B
			P25-43					.13	NO		19	
H 94	3		J5-49					.13	NO		19	B
			P25-68					.13	NO		19	
H 95	2		J5-45					.13	NO		19	B
			P25-7					.13	NO		19	
H 96	3		J5-72					.13	NO		19	B
			P25-27					.13	NO		19	
H 97	3		J5-48					.13	NO		19	B
			P25-45					.13	NO		19	
H 98	3		J5-47					.13	NO		19	B
			P25-26					.13	NO		19	
H 99	3		J5-71					.13	NO		19	B
			P25-25					.13	NO		19	
H 100	3		J5-4					.13	NO		19	B
			P25-47					.13	NO		19	
H 101	3		J5-22					.13	NO		19	B
			P25-70					.13	NO		19	
H 102	3		J5-46					.13	NO		19	B
			P25-46					.13	NO		19	

SIZE	CODE IDENT NO.	
A	80230	2014648
SCALE-NONE	REV LTR J	SHEET 21 OF 32

LEAD IDENT	WIRE MATL ITEM	LEAD LG	CIRCUIT PT FROM (A) TO (B)	TERM. AREA NO.	JKT STRIP LG	SHLD STRIP LG	LEAD CUT LG	INS STRIP LG	TIN	NOTE ONE, FIG	ACCESSORY ITEMS	REMARKS
H 103	2		J5-70					.13	NO		19	D
			P25-73					.13	NO		19	
H 104	3		J5-25					.13	NO		19	B
			P25-13					.13	NO		19	
H 105	3		J5-26					.13	NO		19	B
			P25-72					.13	NO		19	
H 106	3		J5-11					.13	NO		19	B
			P25-74					.13	NO		19	
H 107	3		J5-23					.13	NO		19	B
			P25-44					.13	NO		19	
H 108	3		J5-12					.13	NO		19	B
			P25-71					.13	NO		19	
H 109	3		J5-10					.13	NO		19	B
			P25-69					.13	NO		19	
H 110	3		J5-24					.13	NO		19	B
			P25-18					.13	NO		19	
H 111	2		J5-44					.13	NO		19	B
			P25-21					.13	NO		19	
H 112	2		J5-68					.13	NO		19	B
			P25-8					.13	NO		19	
H 113	2		J5-43					.13	NO		19	B
			P25-1					.13	NO		19	
H 120	2		P27-G3					.18	NO		20	
			P30-6					.13	NO		18	

SIZE	CODE IDENT NO.	
A	80230	2014648
SCALE-NONE	REV LTR J	SHEET 22 OF 32

LEAD IDENT	WIRE MATL ITEM	LEAD LG	CIRCUIT PT FROM (A) TO (B)	TERM. AREA NO.	JKT STRIP LG	SHLD STRIP LG	LEAD CUT LG	INS STRIP LG	TIN	NOTE ONE, FIG	ACCESSORY ITEMS	REMARKS
H 121	2		P27-G2					.18	NO		20	
			P31-6					.13	NO		18	
H 122			DELETED									
H 123			DELETED									
H 128			DELETED									
H 128G			DELETED									
H 128R			DELETED									
H 128Y			DELETED									
H 129	5											
H 129R			P25-32					.13	NO		19	
			P27-F6					.18	NO		21	
H 129Y			P25-15					.13	NO		19	
			P27-G6					.18	NO		21	
H 130			DELETED									
H 130R			DELETED									

SIZE	CODE IDENT NO.	
A	80230	2014648
SCALE-NONE	REV LTR J	SHEET 23 OF 32

LEAD IDENT	WIRE MATL ITEM	LEAD LG	CIRCUIT PT FROM (A) TO (B)	TERM. AREA NO.	JKT STRIP LG	SHLD STRIP LG	LEAD CUT LG	INS STRIP LG	TIN	NOTE ONE, FIG	ACCESSORY ITEMS	REMARKS
H 130Y			DELETED									
H 131	8				1.00	.75				6B	53	
					1.75	1.50				6B	59	
H 131A	11		SHLD H131					.20	NO			
			P27-H2					.18	NO		20	
H 131B			DELETED									
H 131P			P27-K3					.18	NO		21	
			P30-17					.13	NO		18	
H 131Y			P27-H3					.18	NO		21	
			P30-18					.13	NO		18	
H 132	8				1.00	.75				6A	53	
					1.75	1.50				6B	53	
H 132A	11		SHLD H132					.20	NO			
			E16					.19	NO			
H 132B	9		P27-H6					.22	NO			
			SHLD H132					.20	NO			
H 132R			J5-19					.13	NO		19	
			P27-K6					.22	NO			
H 132Y			J5-18					.13	NO		19	
			P27-K7					.22	NO			
H 133	8				1.00	.75				6A	53	
					1.75	1.50				6B	53	

SIZE	CODE IDENT NO.	
A	80230	2014648
SCALE-NONE	REV LTR J	SHEET 24 OF 32

LEAD IDENT	WIRE MATL ITEM	LEAD LG	CIRCUIT PT FROM (A) TO (B)	TERM. AREA NO.	JKT STRIP LG	SHLD STRIP LG	LEAD CUT LG	INS STRIP LG	TIN	NOTE ONE, FIG	ACCESSORY ITEMS	REMARKS
H 133A	11		SHLD H133					.20	NO			
			E17					.19	NO			
H 133B	9		P27-H6					.22	NO		20	
			SHLD H133					.20	NO			
H 133R			P25-38					.13	NO		19	
			P27-K6					.22	NO		20	
H 133Y			P25-40					.13	NO		19	
			P27-K7					.22	NO		20	
H 134	8				1.00	.75				6A	53	
					1.75	1.50				6A	53	
H 134A	11		SHLD H134					.20	NO			
			E16					.19	NO			
H 134B	11		E17					.19	NO			
			SHLD H134					.20	NO			
H 134R			J5-7					.13	NO		19	
			P25-5					.13	NO		19	
H 134Y			J5-8					.13	NO		19	
			P25-4					.13	NO		19	
H 135	4									6A	53	SEE NOTE 30
										6B	53	
H 135A	11		SHLD H135					.20	NO			
			E17					.19	NO		50	
H 135B	11		P31-11					.13	NO			
			SHLD H135					.20	NO			

SIZE	CODE IDENT NO.	
A	80230	2014648
SCALE-NONE	REV LTR J	SHEET 25 OF 32

LEAD IDENT	WIRE MATL ITEM	LEAD LG	CIRCUIT PT FROM (A) TO (B)	TERM. AREA NO.	JKT STRIP LG	SHLD STRIP LG	LEAD CUT LG	INS STRIP LG	TIN	NOTE ONE, FIG	ACCESSORY ITEMS	REMARKS
H 135R			P25-62					.13	NO		19	
			P31-17					.13	NO			
H 135Y			P25-63					.13	NO		19	
			P31-18					.13	NO			
H 136	4									6A	53	SEE NOTE 30
										6B	53	
H 136A	11		SHLD H136					.20	NO			
			E18					.19	NO			
H 136B	11		P31-11					.13	NO			
			SHLD H136					.20	NO			
H 136R			P25-64					.13	NO		19	
			P31-17					.13	NO			
H 136Y			P25-65					.13	NO		19	
			P31-18					.13	NO			
H 137	4									6A	53	SEE NOTE 30
										6B	53	
H 137A	11		SHLD H137					.20	NO			
			E16					.19	NO		50	
H 137B	11		P31-11					.13	NO		18	
			SHLD H137					.20	NO			
H 137R			J5-9					.13	NO		19	
			P31-17					.13	NO		18	
H 137Y			J5-2					.13	NO		19	
			P31-18					.13	NO		18	

LEAD IDENT	WIRE MATL ITEM	LEAD LG	CIRCUIT PT FROM (A) TO (B)	TERM. AREA NO.	JKT STRIP LG	SHLD STRIP LG	LEAD CUT LG	INS STRIP LG	TIN	NOTE ONE, FIG	ACCESSORY ITEMS	REMARKS
H 138	10		E15					.19	NO			A
			NONE									
H 139	10		E15					.19	NO		50	B
			E18					.19	NO		50	
H 141			DELETED									
H 142			DELETED									
H 143			DELETED									
H 144			DELETED									
H 145			DELETED									
H 146			DELETED									
H 147			DELETED									
H 148			DELETED									
H 149			DELETED									
H 150			DELETED									

LEAD IDENT	WIRE MATL ITEM	LEAD LG	CIRCUIT PT FROM (A) TO (B)	TERM. AREA NO.	JKT STRIP LG	SHLD STRIP LG	LEAD CUT LG	INS STRIP LG	TIN	NOTE ONE, FIG	ACCESSORY ITEMS	REMARKS
H 151			DELETED									
H 152			DELETED									
H 153			DELETED									
H 154			DELETED									
H 157	2		P30-4					.13	NO			
			P31-4					.13	NO			
H 158	2		P30-14					.13	NO			
			P31-14					.13	NO			
H 159	2		P30-14					.13	NO			
			P31-14					.13	NO			
H 160	2		P30-15					.13	NO			
			P31-15					.13	NO			
H 161	2		P30-15					.13	NO			
			P31-15					.13	NO			
H 162	2		P30-16					.13	NO			
			P31-16					.13	NO			
H 163	2		P30-16					.13	NO		18	
			P31-16					.13	NO		18	
H 164	2		P30-3					.13	NO		19	
			P30-15					.13	NO		18	

LEAD IDENT	WIRE MATL ITEM	LEAD LG	CIRCUIT PT FROM (A) TO (B)	TERM. AREA NO.	JKT STRIP LG	SHLD STRIP LG	LEAD CUT LG	INS STRIP LG	TIN	NOTE ONE, FIG	ACCESSORY ITEMS	REMARKS
H 165	2		P31-3					.13	NO		18	
			P31-15					.13	NO		18	
H 166	2		P30-1					.13	NO			A
			P31-1					.13	NO			
H 167	2		P30-1					.13	NO			A
			P31-1					.13	NO			
H 168	2		P27-B3					.18	NO		20	
			P30-7					.13	NO			
H 169	2		P27-B2					.18	NO		20	
			P31-7					.13	NO			
H 170	2		P27-B1					.18	NO		20	
			P30-14					.13	NO			
H 171	2		P27-C3					.18	NO		20	
			P30-7					.13	NO			
H 172	2		P27-C2					.18	NO		20	
			P31-7					.13	NO			
H 173	2		P27-C1					.18	NO		20	
			P30-14					.13	NO		18	
H 174	2		P27-D3					.18	NO		20	
			P30-7					.13	NO			
H 175	2		P27-D2					.18	NO		20	
			P31-7					.13	NO			
H 176	2		P27-D1					.18	NO		20	
			P31-14					.13	NO			

LEAD IDENT	WIRE MATL ITEM	LEAD LG	CIRCUIT PT FROM (A) TO (B)	TERM. AREA NO.	JKT STRIP LG	SHLD STRIP LG	LEAD CUT LG	INS STRIP LG	TIN	NOTE ONE, FIG	ACCESSORY ITEMS	REMARKS
H 177	2		P27-F3					.18	NO		20	
			P30-7					.13	NO		18	
H 178	2		P27-F2					.18	NO		20	
			P31-7					.13	NO		18	
H 179	2		P27-F1					.16	NO		20	
			P31-14					.13	NO		18	
H 180	2		J5-53					.13	NO		19	A
			P30-2					.13	NO			
H 181	2		J5-78					.13	NO		19	A
			P31-2					.13	NO			
H 182	2		J5-54					.13	NO		19	A
			P30-1					.13	NO			
H 183	2		J5-79					.13	NO		19	A
			P30-2					.13	NO			
H 184	2		J5-80					.13	NO		19	A
			P31-2					.13	NO			
H 185	2		J5-55					.13	NO		19	A
			P30-1					.13	NO			
H 186	2		J5-33					.13	NO		19	A
			P30-2					.13	NO			
H 187	2		J5-32					.13	NO		19	A
			P31-2					.13	NO			
H 188	2		J5-16					.13	NO		19	A
			P30-1					.13	NO		18	

SIZE	CODE IDENT NO.	
A	80230	2014648
SCALE-NONE	REV LTR J	SHEET 30 OF 32

LEAD IDENT	WIRE MATL ITEM	LEAD LG	CIRCUIT PT FROM (A) TO (B)	TERM. AREA NO.	JKT STRIP LG	SHLD STRIP LG	LEAD CUT LG	INS STRIP LG	TIN	NOTE ONE, FIG	ACCESSORY ITEMS	REMARKS
H 189	2		J5-81					.13	NO		19	A
			P30-2					.13	NO			
H 190	2		J5-57					.13	NO		19	A
			P31-2					.13	NO			
H 191	2		J5-56					.13	NO		19	A
			P31-1					.13	NO			
H 192	2		J5-58					.13	NO		19	A
			P30-7					.13	NO			
H 193	2		J5-34					.13	NO		19	A
			P31-2					.13	NO			
H 194	2		J5-35					.13	NO		19	A
			P31-1					.13	NO			
H 196	2		J5-60					.13	NO		19	
			P30-4					.13	NO		18	
H 197	2		J5-84					.13	NO		19	
			P31-4					.13	NO		18	
H 198	2		J5-31					.13	NO		19	A
			P30-2					.13	NO		18	
H 199	2		J5-15					.13	NO		19	A
			P31-2					.13	NO		18	
H 200	2		J5-5					.13	NO		19	A
			P31-1					.13	NO		18	
H 201	3		P25-14					.13	NO		19	
			P27-F5					.22	NO		20	

SIZE	CODE IDENT NO.	
A	80230	2014648
SCALE-NONE	REV LTR J	SHEET 31 OF 32

CONFIGURATION INCOMPLETE

SIZE	CODE IDENT. NO.	
A	80230	2014648
SCALE NONE	REV LTR J	SHEET 32 of 32

MIL 2084 8-65

APPLICATION		REVISIONS			
NEXT ASSY	USED ON	SYM	DESCRIPTION	DATE	APPROVAL
		F	REPLACES REV(E) WITH CHANGE PER TDRR		
		G	CHANGED PER TDRR 24813		
		H	Revised per TDRR 25306	2-4-66	
		J	REVISED PER TDRR 25887	11 FEB 66	
		K	REVISED PER TDRR 25888	3 MAR 66	

REPLACES REV E WITH CHANGE

REV	K	K	K	K	K	K	K	K	K	K	K	K													
SHEET	21	22	23	24	25	26	27	28	29	30	31	32													
REV STATUS	REV						K	K	K	K	K	K	K	K	K	K	K	K	K	K	K	K	K	K	K
OF SHEETS	SHEET						1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16	17	18	19	20

AC ELECTRONICS DIVISION
GENERAL MOTORS CORP. MILWAUKEE WIS.

MANNED
SPACECRAFT CENTER
HOUSTON, TEXAS

DRAWN R. Rohr DATE 9 DEC '65
CHECKED W. Diehl 9 DEC. '65
APPROVAL E. PETERSON 10 DEC '65
APPROVAL

G & N INTERCONNECT HARNESS "H"

(C/M, BLOCK II)

NASA APPROVAL A. C. MEYZOER
MIT APPROVAL

CODE IDENT NO.	SIZE		REV
80230	A	2014648	K

CONTRACT NAS9-497 SCALE SHEET 1 OF 32

NOTE NUMBER	GENERAL NOTES DESCRIPTION
1	SHIELD TERMINATION FIGURES ARE PER ND1002071 FOR FIG. 6A, 6B AND ND 1002032 FOR FIGURE 7.
2	INTERPRET DRAWING IN ACCORDANCE WITH STANDARDS PRESCRIBED BY MIL-D-70327.
3	INTERCONNECT LIST FOR THIS HARNESS IS 2014678.
4	PARTIAL CIRCUIT POINTS ARE SHOWN. PREFIX WITH UNIT NUMBER 56 FOR COMPLETE CIRCUIT POINT
5	THE SUFFIX LETTER OF A CONDUCTOR IDENTIFICATION NUMBER IDENTIFIES A SHIELD LEAD, COLOR, OR MARKED LETTER. A - FROM END OF SHIELD B - TO END OF SHIELD G - GREEN K - BLACK L - BLUE N - BROWN R - RED W - WHITE Y - YELLOW
6	ASTERISK DENOTES LOWER CASE LETTER
7	GRID MODULE ON PICTURE SHEET IS 1 INCH TRUE POSITION
8	UNLESS OTHERWISE SPECIFIED FEATURE CENTERLINES ON PICTURE SHEET ARE LOCATED WITHIN + OR - .25. ENDS OF HOOKUP WIRES OR ACCESSORIES ARE LOCATED WITHIN .12.
9	VENDOR ITEM - SEE SOURCE CONTROL OR SPECIFICATION CONTROL DRAWING.
10	CRIMP CONTACTS PER ND1002032.

NOTE NUMBER	GENERAL NOTES DESCRIPTION
11	ALL UNUSED CONTACT CAVITIES SHALL BE FILLED WITH A CONTACT OR CONTACT AND SEALING PLUG AS FOLLOWS CONNECTOR 56J5 AND P25 USE ITEM NUMBERS 19 AND 24. CONNECTOR 56P27, USE ITEM NUMBER 20. CONNECTOR 56P30, AND 31 USE ITEM NUMBERS 18 AND 23.
12	LACF HARNESS PER ND1002032 USING ITEM NUMBER 40.
13	A SMALL QUANTITY OF POTTING COMPOUND MUST BE PUT BETWEEN THE THREADED PORTION OF CONNECTOR AND SILICONE RUBBER GROMMET TO SEAL AND BOND RING TO CONNECTOR PRIOR TO POTTING.
14	ALL SHIELDED TERMINATIONS SHALL BE LOCATED BELOW REFERENCE LINE A. THERE SHALL BE NO EXPOSED CONDUCTORS AT THE SURFACE OF THE POTTING COMPOUND.
15	BEFORE LACING HARNESS, APPLY 2 TURNS OF TAPE TO INDICATE CABLE CLAMP LOCATION.
16	WRAP TAPE AROUND HARNESS IN AREA SHOWN AS REQUIRED TO BUILD UP DIAMETER TO FIT SHELL HOLE.
17	MARK CONNECTOR WITH REFERENCE DESIGNATION AS SHOWN .12 HIGH, BLACK, HOT IMPRESSION STAMPING PERND1002019, CENTRALIZE.
19	MARK CHARACTERS .12 HIGH, BLACK, PER ND1002019, SERIALIZE PER ND1002023.
20	CONTINUITY TEST PER CONDUCTOR CHART. RESISTANCE SHALL BE LESS THAN 1/2 OHM. TEST PER MIL-STD-202, METHOD 303.

NOTE NUMBER	GENERAL NOTES DESCRIPTION
21	INSULATION RESISTANCE SHALL BE GREATER THAN 100 MEGOHMS WITH 500 VDC APPLIED BETWEEN A. THE ASSEMBLY PINS AND STRUCTURE GROUND, WITH THE EXCEPTION OF THOSE PINS ELECTRICALLY CONNECTED TO STRUCTURE GROUND AND THOSE PINS SPECIFIED IN PAR. B. B. EACH PIN AND ALL OTHER PINS NOT ELECTRICALLY CONNECTED, INCLUDING ALL SPARE PINS. TEST PER MIL-STD-202, METHOD 302, EXCEPT ELECTRIFICATION TIME NOT APPLICABLE. SHORT CIRCUIT CURRENT LIMITED TO 15 MILLIAMPS.
22	PRESEAL BACK OF CONNECTOR P27 PRIOR TO ENCAPSULATION PER ND1002187 TYPE III USING ITEMS 36, 37, 38, AND 39.
23	ENCAPSULATE BACK OF CONNECTORS PER ND1002236 USING ITEMS 34 AND 35.
24	CONDUCTORS LISTED WITH AN A OR B IN THE REMARKS COLUMN ARE TO BE GROUP SHIELDED PER DETAILS A, B AND C OF THE CONFIGURATION DRAWING.
25	GROUP SHIELDING - THREAD ONE CONTINUOUS LENGTH OF GROUND WIRE, ITEM 10, THROUGH CENTER OF EMI/RFI SHIELDING TAPE, ITEM 29. ALLOW 6 INCHES OF GROUND WIRE TO EXTEND BEYOND ENDS OF SHIELDING TAPE. WRAP CABLE WITH ONE CONTINUOUS LENGTH OF PREPARED SHIELDING. SUCCESSIVE TURNS SHALL OVERLAP BY APPROXIMATELY 1/2 THE WIDTH OF THE TAPE, WITH A MINIMUM OF RIDGES AND FOLDS.
26	COMPLETELY COVER SHIELD WITH ONE CONTINUOUS WRAP OF INSULATION TAPE, ITEM 32. SUCCESSIVE TURNS SHALL OVERLAP BY APPROXIMATELY 1/2 THE WIDTH OF THE TAPE, WITH A MINIMUM OF RIDGES AND FOLDS. WRAP TAPE IN OPPOSITE DIRECTION TO SHIELD WRAP.

NOTE NUMBER	GENERAL NOTES DESCRIPTION
27	ASSEMBLE INSULATION TUBING, ITEM 30, OVER GROUND WIRE AS REQUIRED TO REACH TERMINATION. ASSEMBLE SHRINK SLEEVING AS SHOWN.
28	DELETED
29	DELETED
30	ASSEMBLE A LENGTH OF WIRE BRAID, ITEM 57, OVER CONDUCTORS H135, H136, AND H137. ALLOW 1.50 INCHES OF LEAD TO EXTEND BEYOND BRAID. COVER BRAID WITH TEFLON TAPE, ITEM 32, PER NOTE 26. ALLOW .25 INCH OF BRAID TO EXTEND BEYOND TAPE. FOLD BRAID OVER TAPE AND TERMINATE PER ND1002071, FIG. 6B.
31	NUMBERS INDICATE SEQUENCE IN WHICH GROUP SHIELD A IS TO BE WRAPPED. CUT DRAIN WIRE BACK 1/2 INCH WITHIN SHIELD WRAP AT P30 AND P31 ENDS.
32	PERFORM WORKMANSHIP VIBRATION A. SINUSOIDAL SWEEP AT 3.5 G RMS. LIMITED TO 0.3 INCH PEAK TO PEAK DISPLACEMENT, FROM 10 TO 2000 CPS AT A RATE OF 4 OCTAVES PER MINUTE. B. VIBRATION ALONG THE X AXIS OF THE SPACE CRAFT. C. MONITOR FOR DISCONTINUITIES OF 10 MICRO SECONDS OR GREATER DURING VIBRATION. D. COMPLETE CONTINUITY AND INSULATION RESISTANCE TESTING MUST BE ACCOMPLISHED AFTER VIBRATION.

NOTE NUMBER — GENERAL NOTES

DESCRIPTION

LEAD TOLERANCE CHART

	LEAD LG	JKT STRIP LG	SHIELD STRIP LG	LEAD CUT LG	INS STRIP LG
UNDER 3 INCHES	+ .12-.00	+.06-.06	+.06-.06	+.06-.06	+.06-.00
3 INCH TO 3 FT	+ .50-.00	+.25-.25	+.25-.25	+.25-.25	
3 FT TO 10 FT	+1.00-.00				
10 FT AND OVER	+2.00-.00				

SIZE	CODE IDENT NO.	
A	80230	2014648
SCALE-NONE	REV LTR K	SHEET 6 OF 32

MIL 2084 9-65

SEE NOTE — LIST OF MATERIALS

NUMBER	ITEM	QTY	PART NO.	DESCRIPTION
	1			DELETED
	2	1	2014648-002	WIRE PER 1010789-006, 22 AWG, YEL, 240 FT TOT LG
	3	1	2014648-003	WIRE PER 1010789-016, 26 AWG, YEL, 170 FT TOT LG
	4	1	2014648-004	WIRE PER 1010789-008, 22 AWG, YEL, RED, 10 FT.TOT LG
	5	1	2014648-005	WIRE PER 1010789-017, 26 AWG, YEL, RED, 8 FT TOT LG
	6			DELETED
	7	1	2014648-007	WIRE PER 1010789-019, 26 AWG, YEL, RED, GRN, BRN, 5 FT TOT LG
	8	1	2014648-008	WIRE PER 1010789-015, 26 AWG, YEL, RED, YEL JKT, 20 FT TOT LG
	9	1	2014648-009	WIRE PER 1010789-024, 26 AWG, BLK, 5 FT TOT LG
	10	1	2014648-010	WIRE PER QQ-W-343, TYPE C, CLASS C, 22 AWG, 30 FT TOT LG
	11	1	2014648-011	WIRE PER 1010789-002, 24 AWG, BLK, 5 FT TOT LG
	12	1	2014748-011	CONNECTOR, PLUG, ELECTRICAL, (56P27)
9	13	1	1010929-003	CONNECTOR, PLUG, ELECTRICAL, (56P25)
9	14	1	1010921- 1	CONNECTOR, PLUG, ELECTRICAL, (56P30)

SIZE	CODE IDENT NO.	
A	80230	2014648
SCALE-NONE	REV LTR K	SHEET 7 OF 32

MIL 2084 9-65

SEE NOTE — LIST OF MATERIALS

NUMBER	ITEM	QTY	PART NO.	DESCRIPTION
9	15	1	1010921- 2	CONNECTOR, PLUG, ELECTRICAL, (56P31)
9	16	1	1010930-003	CONNECTOR, RECEPTACLE, ELECTRICAL (56J5)
9	18	36	1010932- 2	CONTACT, PIN
9	19	X	1010770- 2	CONTACT, SOCKET, SUPPLIED WITH CONNECTORS 1010929, AND 1010930.
9	20	56	1010955- 1	CONTACT, MALE
9	21	8	1010955- 2	CONTACT, MALE
	22	2	2014670- 11	ADAPTER, CONNECTOR
9	23	7	1010983- 1	PLUG, PROTECTIVE SEALING
9	24	39	1010958- 1	PLUG, PROTECTIVE SEALING
	25			DELETED
9	29	AR	1010989	TAPE, SHIELDING, EMI/RFI
9	30	AR	1006776- 19	INSULATION SLEEVING
	32	AR	MIL-T-23594	TAPE, TEFLON, TYPE II, 1 INCH WIDE
	33	AR	MIL-T-23594	TAPE, TEFLON, TYPE II, 1/4 INCH WIDE
9	34	AR	1012503	COMPOUND, POTTING, POLYURETHANE
9	35	AR	1012504	PRIMER, METAL PARTS
9	36	AR	1006277	SILICA, PULVERIZED, PYROGENIC
9	37	AR	1008822	COLORANT, EPOXY BASE

SIZE	CODE IDENT NO.	
A	80230	2014648
SCALE-NONE	REV LTR K	SHEET 8 OF 32

MIL 2084 9-65

SEE NOTE — LIST OF MATERIALS

NUMBER	ITEM	QTY	PART NO.	DESCRIPTION
9	38	AR	1010661	EPOXY RESIN
9	39	AR	1010679	ADHESIVE ACTIVATOR
9	40	AR	1012507-004	TAPE, LACING AND TYING
	42			DELETED
	43			DELETED
	44			DELETED
	45			DELETED
	46			DELETED
	47			DELETED
	48			DELETED
	49			DELETED
	50	4	MS17182-1	TERMINAL LUG
	51	4	MS35333-69	WASHER, LOCK
9	52	4	1006783- 93	SCREW, BUTTON HD
9	53	13	1010402- 2	SLEEVE, SOLDER
	54			DELETED
	55			DELETED
	56			DELETED

SIZE	CODE IDENT NO.	
A	80230	2014648
SCALE-NONE	REV LTR K	SHEET 9 OF 32

MIL 2084 9-65

SEE NOTE

LIST OF MATERIALS

NUMBER	ITEM	QTY	PART NO.	DESCRIPTION
	57	1	2014648-012	WIRE BRAID, QQ-B-575, .12 DIA, 36 AWG, 10 FT TOTAL LENGTH
	58			DELETED
	59	1	1012534- 36	SLEEVING, INSULATION, ELEC, (HEAT SHRINKABLE)

SIZE	CODE IDENT NO.	
A	80230	2014648
SCALE-NONE	REV LTR K	SHEET 10 OF 32

MIL 2084 9-65

LEAD IDENT		WIRE MATL ITEM	LEAD LG	CIRCUIT PT FROM (A) TO (B)	TERM. AREA NO.	JKT STRIP LG	SHLD STRIP LG	LEAD CUT LG	INS STRIP LG	TIN	NOTE ONE, FIG	ACCESSORY ITEMS	REMARKS
H	1			DELETED									
H	2			DELETED									
H	3	2		P27-A6 P30-9					.18 .13	NO NO		20	
H	4	2		P27-A7 P30-9					.18 .13	NO NO		20	
H	5	2		P27-B6 P30-9					.18 .13	NO NO		20	
H	6	2		P27-B7 P30-9					.18 .13	NO NO		20 18	
H	7	2		P27-C6 P30-10					.18 .13	NO NO		20	
H	8	2		P27-C7 P30-10					.18 .13	NO NO		20	
H	9	2		P27-D6 P30-10					.18 .13	NO NO		20 18	
H	10			DELETED									
H	11			DELETED									
H	12	2		P27-A3 P31-9					.18 .13	NO NO		20	

SIZE	CODE IDENT NO.	
A	80230	2014648
SCALE-NONE	REV LTR K	SHEET 11 OF 32

MIL 2084 9-65

LEAD IDENT		WIRE MATL ITEM	LEAD LG	CIRCUIT PT FROM (A) TO (B)	TERM. AREA NO.	JKT STRIP LG	SHLD STRIP LG	LEAD CUT LG	INS STRIP LG	TIN	NOTE ONE, FIG	ACCESSORY ITEMS	REMARKS
H	13	2		P27-A4 P31-9					.18 .13	NO NO		20	
H	14	2		P27-A5 P31-9					.18 .13	NO NO		20	
H	15	2		P27-B4 P31-9					.18 .13	NO NO		20 18	
H	16	2		P27-B5 P31-10					.18 .13	NO NO		20	
H	17	2		P27-C4 P31-10					.18 .13	NO NO		20	
H	18	2		P27-C5 P31-10					.18 .13	NO NO		20 18	
H	19			DELETED									
H	20	2		P27-F7 P30-8					.18 .13	NO NO		20	
H	21	2		P27-G7 P30-8					.18 .13	NO NO		20	
H	22	2		P27-H7 P30-8					.18 .13	NO NO		20 18	
H	23			DELETED									
H	24	2		P27-F8 P31-8					.18 .13	NO NO		20	

SIZE	CODE IDENT NO.	
A	80230	2014648
SCALE-NONE	REV LTR K	SHEET 12 OF 32

MIL 2084 9-65

LEAD IDENT		WIRE MATL ITEM	LEAD LG	CIRCUIT PT FROM (A) TO (B)	TERM. AREA NO.	JKT STRIP LG	SHLD STRIP LG	LEAD CUT LG	INS STRIP LG	TIN	NOTE ONE, FIG	ACCESSORY ITEMS	REMARKS
H	25	2		P27-G8 P31-8					.18 .13	NO NO		20	
H	26	2		P27-H8 P31-8					.18 .13	NO NO		20 18	
H	27			DELETED									
H	28			DELETED									
H	29			DELETED									
H	30			DELETED									
H	31			DELETED									
H	32			DELETED									
H	33	2		P27-B8 P30-16					.18 .13	NO NO		20	
H	34	2		P27-B9 P31-16					.18 .13	NO NO		20	
H	35	2		P27-C8 P30-16					.18 .13	NO NO		20	
H	36	2		P27-C9 P31-16					.18 .13	NO NO		20	

SIZE	CODE IDENT NO.	
A	80230	2014648
SCALE-NONE	REV LTR K	SHEET 13 OF 32

MIL 2084 9-65

LEAD IDENT	WIRE MATL ITEM	LEAD LG	CIRCUIT PT FROM (A) TO (B)	TERM.JKT AREA NO.	STRIP LG	SHLD STRIP LG	LEAD CUT LG	INS STRIP LG	TIN	NOTE ONE, FIG	ACCESSORY ITEMS	REMARKS
H 37	2		P27-D7					.18	NO		20	
			P31-15					.13	NO			
H 38	2		P27-D8					.18	NO		20	
			P31-15					.13	NO			
H 39	2		P27-D9					.18	NO		20	
			P30-15					.13	NO			
H 40	2		P27-F9					.18	NO		20	
			P30-15					.13	NO			
H 41	2		P27-G9					.18	NO		20	
			P30-3					.13	NO			
H 42	2		P27-H9					.18	NO		20	
			P31-3					.13	NO			
H 43			DELETED									
H 44			DELETED									
H 45			DELETED									
H 46			DELETED									
H 47			DELETED									
H 47G			DELETED									

SIZE	CODE IDENT NO.	
A	80230	2014648
SCALE-NONE	REV LTR K	SHEET 14 OF 32

MIL 2084 9-65

LEAD IDENT	WIRE MATL ITEM	LEAD LG	CIRCUIT PT FROM (A) TO (B)	TERM.JKT AREA NO.	STRIP LG	SHLD STRIP LG	LEAD CUT LG	INS STRIP LG	TIN	NOTE ONE, FIG	ACCESSORY ITEMS	REMARKS
H 47R			DELETED									
H 47Y			DELETED									
H 48			DELETED									
H 48G			DELETED									
H 48R			DELETED									
H 48Y			DELETED									
H 49			DELETED									
H 49G			DELETED									
H 49R			DELETED									
H 49Y			DELETED									
H 50			DELETED									
H 50G			DELETED									

SIZE	CODE IDENT NO.	
A	80230	2014648
SCALE-NONE	REV LTR K	SHEET 15 OF 32

MIL 2084 9-65

LEAD IDENT	WIRE MATL ITEM	LEAD LG	CIRCUIT PT FROM (A) TO (B)	TERM.JKT AREA NO.	STRIP LG	SHLD STRIP LG	LEAD CUT LG	INS STRIP LG	TIN	NOTE ONE, FIG	ACCESSORY ITEMS	REMARKS
H 50R			DELETED									
H 50Y			DFLETED									
H 51			DELETED									
H 52			DELETED									
H 53			DELETED									
H 54			DELETED									
H 55			DELETED									
H 55G			DELETED									
H 55R			DELETED									
H 55Y			DFLETED									
H 56			DELETED									
H 56G			DELETED									

SIZE	CODE IDENT NO.	
A	80230	2014648
SCALE-NONE	REV LTR K	SHEET 16 OF 32

MIL 2084 9-65

LEAD IDENT	WIRE MATL ITEM	LEAD LG	CIRCUIT PT FROM (A) TO (B)	TERM.JKT AREA NO.	STRIP LG	SHLD STRIP LG	LEAD CUT LG	INS STRIP LG	TIN	NOTE ONE, FIG	ACCESSORY ITEMS	REMARKS
H 56R			DELETED									
H 56Y			DELETED									
H 57			DELETED									
H 57G			DELETED									
H 57R			DELETED									
H 57Y			DELETED									
H 58			DELETED									
H 58G			DELETED									
H 58R			DELETED									
H 58Y			DELETED									
H 59			DELETED									
H 59G			DELETED									

SIZE	CODE IDENT NO.	
A	80230	2014648
SCALE-NONE	REV LTR K	SHEET 17 OF 32

MIL 2084 9-65

LEAD IDENT	WIRE MATL ITEM	LEAD LG	CIRCUIT PT FROM (A) TO (B)	TERM.JKT AREA NO.	STRIP LG	SHLD STRIP LG	LEAD CUT LG	INS STRIP LG	TIN	NOTE ONE, FIG	ACCESSORY ITEMS	REMARKS
H 59R			DELETED									
H 59Y			DELETED									
H 61			DELETED									
H 62			DELETED									
H 63R			DELETED									
H 63Y			DELETED									
H 67	5											
H 67R			P25-83					.13	NO		19	
			P27-K5					.18	NO		21	
H 67Y			P25-84					.13	NO		19	
			P27-K4					.18	NO		21	
H 68	7											
H 68G			P25-55					.13	NO		19	
			P27-H4					.22	NO			
H 68N			P25-53					.13	NO		19	
			P27-H4					.22	NO		20	

SIZE	CODE IDENT NO.	
A	80230	2014648
SCALE-NONE	REV LTR K	SHEET 18 OF 32

MIL 2084 9-65

LEAD IDENT	WIRE MATL ITEM	LEAD LG	CIRCUIT PT FROM (A) TO (B)	TERM.JKT AREA NO.	STRIP LG	SHLD STRIP LG	LEAD CUT LG	INS STRIP LG	TIN	NOTE ONE, FIG	ACCESSORY ITEMS	REMARKS
H 68R			P25-31					.13	NO		19	
			P27-H5					.18	NO		21	
H 68Y			P25-54					.13	NO		19	
			P27-G5					.18	NO		21	
H 69	2		P25-57					.13	NO		19	
			P27-G4					.18	NO		20	
H 70	3		J5-62					.13	NO		19	B
			P25-51					.13	NO		19	
H 71	3		J5-63					.13	NO		19	B
			P25-78					.13	NO		19	
H 72	3		J5-38					.13	NO		19	B
			P25-77					.13	NO		19	
H 73	3		J5-40					.13	NO		19	B
			P25-76					.13	NO		19	
H 74	3		J5-39					.13	NO		19	B
			P25-79					.13	NO		19	
H 75	3		J5-64					.13	NO		19	B
			P25-49					.13	NO		19	
H 76	2		J5-66					.13	NO		19	B
			P25-30					.13	NO		19	
H 77	3		J5-65					.13	NO		19	B
			P25-75					.13	NO		19	
H 78	2		J5-41					.13	NO		19	B
			P25-28					.13	NO		19	

SIZE	CODE IDENT NO.	
A	80230	2014648
SCALE-NONE	REV LTR K	SHEET 19 OF 32

MIL 2084 9-65

LEAD IDENT	WIRE MATL ITEM	LEAD LG	CIRCUIT PT FROM (A) TO (B)	TERM.JKT AREA NO.	STRIP LG	SHLD STRIP LG	LEAD CUT LG	INS STRIP LG	TIN	NOTE ONE, FIG	ACCESSORY ITEMS	REMARKS
H 79	2		J5-42					.13	NO		19	B
			P25-48					.13	NO		19	
H 80	3		J5-52					.13	NO		19	B
			P25-2					.13	NO		19	
H 81	3		J5-76					.13	NO		19	B
			P25-9					.13	NO		19	
H 82	3		J5-30					.13	NO		19	B
			P25-22					.13	NO		19	
H 83	3		J5-29					.13	NO		19	B
			P25-41					.13	NO		19	
H 84	3		J5-14					.13	NO		19	B
			P25-66					.13	NO		19	
H 85	3		J5-50					.13	NO		19	B
			P25-3					.13	NO		19	
H 86	3		J5-74					.13	NO		19	B
			P25-10					.13	NO		19	
H 87	3		J5-75					.13	NO		19	B
			P25-23					.13	NO		19	
H 88	3		J5-51					.13	NO		19	B
			P25-42					.13	NO		19	
H 89	3		J5-77					.13	NO		19	B
			P25-67					.13	NO		19	
H 90	3		J5-27					.13	NO		19	B
			P25-12					.13	NO		19	

SIZE	CODE IDENT NO.	
A	80230	2014648
SCALE-NONE	REV LTR K	SHEET 20 OF 32

MIL 2084 9-65

LEAD IDENT	WIRE MATL ITEM	LEAD LG	CIRCUIT PT FROM (A) TO (B)	TERM.JKT AREA NO.	STRIP LG	SHLD STRIP LG	LEAD CUT LG	INS STRIP LG	TIN	NOTE ONE, FIG	ACCESSORY ITEMS	REMARKS
H 91	3		J5-13					.13	NO		19	B
			P25-11					.13	NO		19	
H 92	3		J5-28					.13	NO		19	B
			P25-24					.13	NO		19	
H 93	3		J5-73					.13	NO		19	B
			P25-43					.13	NO		19	
H 94	3		J5-49					.13	NO		19	B
			P25-68					.13	NO		19	
H 95	2		J5-45					.13	NO		19	B
			P25-7					.13	NO		19	
H 96	3		J5-72					.13	NO		19	B
			P25-27					.13	NO		19	
H 97	3		J5-48					.13	NO		19	B
			P25-45					.13	NO		19	
H 98	3		J5-47					.13	NO		19	B
			P25-26					.13	NO		19	
H 99	3		J5-71					.13	NO		19	B
			P25-25					.13	NO		19	
H 100	3		J5-4					.13	NO		19	B
			P25-47					.13	NO		19	
H 101	3		J5-22					.13	NO		19	B
			P25-70					.13	NO		19	
H 102	3		J5-46					.13	NO		19	B
			P25-46					.13	NO		19	

SIZE	CODE IDENT NO.	
A	80230	2014648
SCALE-NONE	REV LTR K	SHEET 21 OF 32

MIL 2084 9-65

LEAD IDENT	WIRE MATL ITEM	LEAD LG	CIRCUIT PT FROM (A) TO (B)	TERM. AREA NO.	JKT STRIP LG	SHLD STRIP LG	LEAD CUT LG	INS STRIP LG	TIN	NOTE ONE, FIG	ACCESSORY ITEMS	REMARKS
H 103	2		J5-70					.13	NO		19	D
			P25-73					.13	NO		19	
H 104	3		J5-25					.13	NO		19	B
			P25-13					.13	NO		19	
H 105	3		J5-26					.13	NO		19	B
			P25-72					.13	NO		19	
H 106	3		J5-11					.13	NO		19	B
			P25-74					.13	NO		19	
H 107	3		J5-23					.13	NO		19	B
			P25-44					.13	NO		19	
H 108	3		J5-12					.13	NO		19	B
			P25-71					.13	NO		19	
H 109	3		J5-10					.13	NO		19	B
			P25-69					.13	NO		19	
H 110	3		J5-24					.13	NO		19	B
			P25-18					.13	NO		19	
H 111	2		J5-44					.13	NO		19	B
			P25-21					.13	NO		19	
H 112	2		J5-68					.13	NO		19	B
			P25-8					.13	NO		19	
H 113	2		J5-43					.13	NO		19	B
			P25-1					.13	NO		19	
H 120	2		P27-G3					.18	NO		20	
			P30-6					.13	NO		18	

SIZE	CODE IDENT NO.	
A	80230	2014648
SCALE-NONE	REV LTR K	SHEET 22 OF 32

MIL 2084 9-65

LEAD IDENT	WIRE MATL ITEM	LEAD LG	CIRCUIT PT FROM (A) TO (B)	TERM. AREA NO.	JKT STRIP LG	SHLD STRIP LG	LEAD CUT LG	INS STRIP LG	TIN	NOTE ONE, FIG	ACCESSORY ITEMS	REMARKS
H 121	2		P27-G2					.18	NO		20	
			P31-6					.13	NO		18	
H 122			DELETED									
H 123			DELETED									
H 128			DELETED									
H 128G			DELETED									
H 128R			DELETED									
H 128Y			DELETED									
H 129	5											
H 129R			P25-32					.13	NO		19	
			P27-F6					.18	NO		21	
H 129Y			P25-15					.13	NO		19	
			P27-G6					.18	NO		21	
H 130			DELETED									
H 130R			DELETED									

SIZE	CODE IDENT NO.	
A	80230	2014648
SCALE-NONE	REV LTR K	SHEET 23 OF 32

MIL 2084 9-65

LEAD IDENT	WIRE MATL ITEM	LEAD LG	CIRCUIT PT FROM (A) TO (B)	TERM. AREA NO.	JKT STRIP LG	SHLD STRIP LG	LEAD CUT LG	INS STRIP LG	TIN	NOTE ONE, FIG	ACCESSORY ITEMS	REMARKS
H 130Y			DELETED									
H 131	8				1.00	.75				6B	53	
					1.75	1.50				6B	59	
H 131A	11		SHLD H131					.20	NO			
			P27-H2					.18	NO		20	
H 131B			DELETED									
H 131R			P27-K3					.18	NO		21	
			P30-17					.13	NO		18	
H 131Y			P27-H3					.18	NO		21	
			P30-18					.13	NO		18	
H 132	8				1.00	.75				6A	53	
					1.75	1.50				6B	53	
H 132A	11		SHLD H132					.20	NO			
			E16					.19	NO			
H 132B	9		P27-H6					.22	NO			
			SHLD H132					.20	NO			
H 132R			J5-19					.13	NO		19	
			P27-K6					.22	NO			
H 132Y			J5-18					.13	NO		19	
			P27-K7					.22	NO			
H 133	8				1.00	.75				6A	53	
					1.75	1.50				6B	53	

SIZE	CODE IDENT NO.	
A	80230	2014648
SCALE-NONE	REV LTR K	SHEET 24 OF 32

MIL 2084 9-65

LEAD IDENT	WIRE MATL ITEM	LEAD LG	CIRCUIT PT FROM (A) TO (B)	TERM. AREA NO.	JKT STRIP LG	SHLD STRIP LG	LEAD CUT LG	INS STRIP LG	TIN	NOTE ONE, FIG	ACCESSORY ITEMS	REMARKS
H 133A	11		SHLD H133					.20	NO			
			E17					.19	NO			
H 133B	9		P27-H6					.22	NO		20	
			SHLD H133					.20	NO			
H 133R			P25-38					.13	NO		19	
			P27-K6					.22	NO		20	
H 133Y			P25-40					.13	NO		19	
			P27-K7					.22	NO		20	
H 134	8				1.00	.75				6A	53	
					1.75	1.50				6A	53	
H 134A	11		SHLD H134					.20	NO			
			E16					.19	NO			
H 134B	11		E17					.19	NO			
			SHLD H134					.20	NO			
H 134R			J5-7					.13	NO		19	
			P25-5					.13	NO		19	
H 134Y			J5-8					.13	NO		19	
			P25-4					.13	NO		19	
H 135	4									6A	53	SEE NOTE 30
										6B	53	
H 135A	11		SHLD H135					.20	NO			
			E17					.19	NO		50	
H 135B	11		P31-11					.13	NO			
			SHLD H135					.20	NO			

SIZE	CODE IDENT NO.	
A	80230	2014648
SCALE-NONE	REV LTR K	SHEET 25 OF 32

MIL 2084 9-65

LEAD IDENT	WIRE MATL ITEM	LEAD LG	CIRCUIT PT FROM (A) TO (B)	TERM. AREA NO.	JKT STRIP LG	SHLD STRIP LG	LEAD CUT LG	INS STRIP LG	TIN	NOTE ONE, FIG	ACCESSORY ITEMS	REMARKS
H 135R			P25-62					.13	NO		19	
			P31-17					.13	NO			
H 135Y			P25-63					.13	NO		19	
			P31-18					.13	NO			
H 136	4									6A	53	SEE NOTE 30
										6B	53	
H 136A	11		SHLD H136					.20	NO			
			E18					.19	NO			
H 136B	11		P31-11					.13	NO			
			SHLD H136					.20	NO			
H 136R			P25-64					.13	NO		19	
			P31-17					.13	NO			
H 136Y			P25-65					.13	NO		19	
			P31-18					.13	NO			
H 137	4									6A	53	SEE NOTE 30
										6B	53	
H 137A	11		SHLD H137					.20	NO			
			E16					.19	NO		50	
H 137B	11		P31-11					.13	NO		18	
			SHLD H137					.20	NO			
H 137R			J5-9					.13	NO		19	
			P31-17					.13	NO		18	
H 137Y			J5-2					.13	NO		19	
			P31-18					.13	NO		18	

SIZE	CODE IDENT NO.	
A	80230	2014648
SCALE-NONE	REV LTR K	SHEET 26 OF 32

MIL 2084 9-65

LEAD IDENT	WIRE MATL ITEM	LEAD LG	CIRCUIT PT FROM (A) TO (B)	TERM. AREA NO.	JKT STRIP LG	SHLD STRIP LG	LEAD CUT LG	INS STRIP LG	TIN	NOTE ONE, FIG	ACCESSORY ITEMS	REMARKS
H 138	10		E15					.19	NO			A
			NONE									
H 139	10		E15					.19	NO		50	B
			E18					.19	NO		50	
H 141			DELETED									
H 142			DELETED									
H 143			DELETED									
H 144			DELETED									
H 145			DELETED									
H 146			DELETED									
H 147			DELETED									
H 148			DELETED									
H 149			DELETED									
H 150			DELETED									

SIZE	CODE IDENT NO.	
A	80230	2014648
SCALE-NONE	REV LTR K	SHEET 27 OF 32

MIL 2084 9-65

LEAD IDENT	WIRE MATL ITEM	LEAD LG	CIRCUIT PT FROM (A) TO (B)	TERM. AREA NO.	JKT STRIP LG	SHLD STRIP LG	LEAD CUT LG	INS STRIP LG	TIN	NOTE ONE, FIG	ACCESSORY ITEMS	REMARKS
H 151			DELETED									
H 152			DELETED									
H 153			DELETED									
H 154			DELETED									
H 157	2		P30-4					.13	NO			
			P31-4					.13	NO			
H 158	2		P30-14					.13	NO			
			P31-14					.13	NO			
H 159	2		P30-14					.13	NO			
			P31-14					.13	NO			
H 160	2		P30-15					.13	NO			
			P31-15					.13	NO			
H 161	2		P30-15					.13	NO			
			P31-15					.13	NO			
H 162	2		P30-16					.13	NO			
			P31-16					.13	NO			
H 163	2		P30-16					.13	NO		18	
			P31-16					.13	NO		18	
H 164	2		P30-3					.13	NO		18	
			P30-15					.13	NO		18	

SIZE	CODE IDENT NO.	
A	80230	2014648
SCALE-NONE	REV LTR K	SHEET 28 OF 32

MIL 2084 9-65

LEAD IDENT	WIRE MATL ITEM	LEAD LG	CIRCUIT PT FROM (A) TO (B)	TERM. AREA NO.	JKT STRIP LG	SHLD STRIP LG	LEAD CUT LG	INS STRIP LG	TIN	NOTE ONE, FIG	ACCESSORY ITEMS	REMARKS
H 165	2		P31-3					.13	NO		18	
			P31-15					.13	NO		18	
H 166	2		P30-1					.13	NO			A
			P31-1					.13	NO			
H 167	2		P30-1					.13	NO			A
			P31-1					.13	NO			
H 168	2		P27-B3					.18	NO		20	
			P30-7					.13	NO			
H 169	2		P27-B2					.18	NO		20	
			P31-7					.13	NO			
H 170	2		P27-B1					.18	NO		20	
			P30-14					.13	NO			
H 171	2		P27-C3					.18	NO		20	
			P30-7					.13	NO			
H 172	2		P27-C2					.18	NO		20	
			P31-7					.13	NO			
H 173	2		P27-C1					.18	NO		20	
			P30-14					.13	NO		18	
H 174	2		P27-D3					.18	NO		20	
			P30-7					.13	NO			
H 175	2		P27-D2					.18	NO		20	
			P31-7					.13	NO			
H 176	2		P27-D1					.18	NO		20	
			P31-14					.13	NO			

SIZE	CODE IDENT NO.	
A	80230	2014648
SCALE-NONE	REV LTR K	SHEET 29 OF 32

MIL 2084 9-65

LEAD IDENT	WIRE MATL ITEM	LEAD LG	CIRCUIT PT FROM (A) TO (B)	TERM. AREA NO.	JKT STRIP LG	SHLD STRIP LG	LEAD CUT LG	INS STRIP LG	TIN	NOTE ONE, FIG	ACCESSORY ITEMS	REMARKS
H 177	2		P27-F3					.18	NO		20	
			P30-7					.13	NO		18	
H 178	2		P27-F2					.18	NO		20	
			P31-7					.13	NO		18	
H 179	2		P27-F1					.18	NO		20	
			P31-14					.13	NO		18	
H 180	2		J5-53					.13	NO		19	A
			P30-2					.13	NO			
H 181	2		J5-78					.13	NO		19	A
			P31-2					.13	NO			
H 182	2		J5-54					.13	NO		19	A
			P30-1					.13	NO			
H 183	2		J5-79					.13	NO		19	A
			P30-2					.13	NO			
H 184	2		J5-80					.13	NO		19	A
			P31-2					.13	NO			
H 185	2		J5-55					.13	NO		19	A
			P30-1					.13	NO			
H 186	2		J5-33					.13	NO		19	A
			P30-2					.13	NO			
H 187	2		J5-32					.13	NO		19	A
			P31-2					.13	NO			
H 188	2		J5-16					.13	NO		19	A
			P30-1					.13	NO		18	

SIZE	CODE IDENT NO.	
A	80230	2014648
SCALE-NONE	REV LTR K	SHEET 30 OF 32

MIL 2084 9-65

G AND N INTERCONNECT 2014648 K

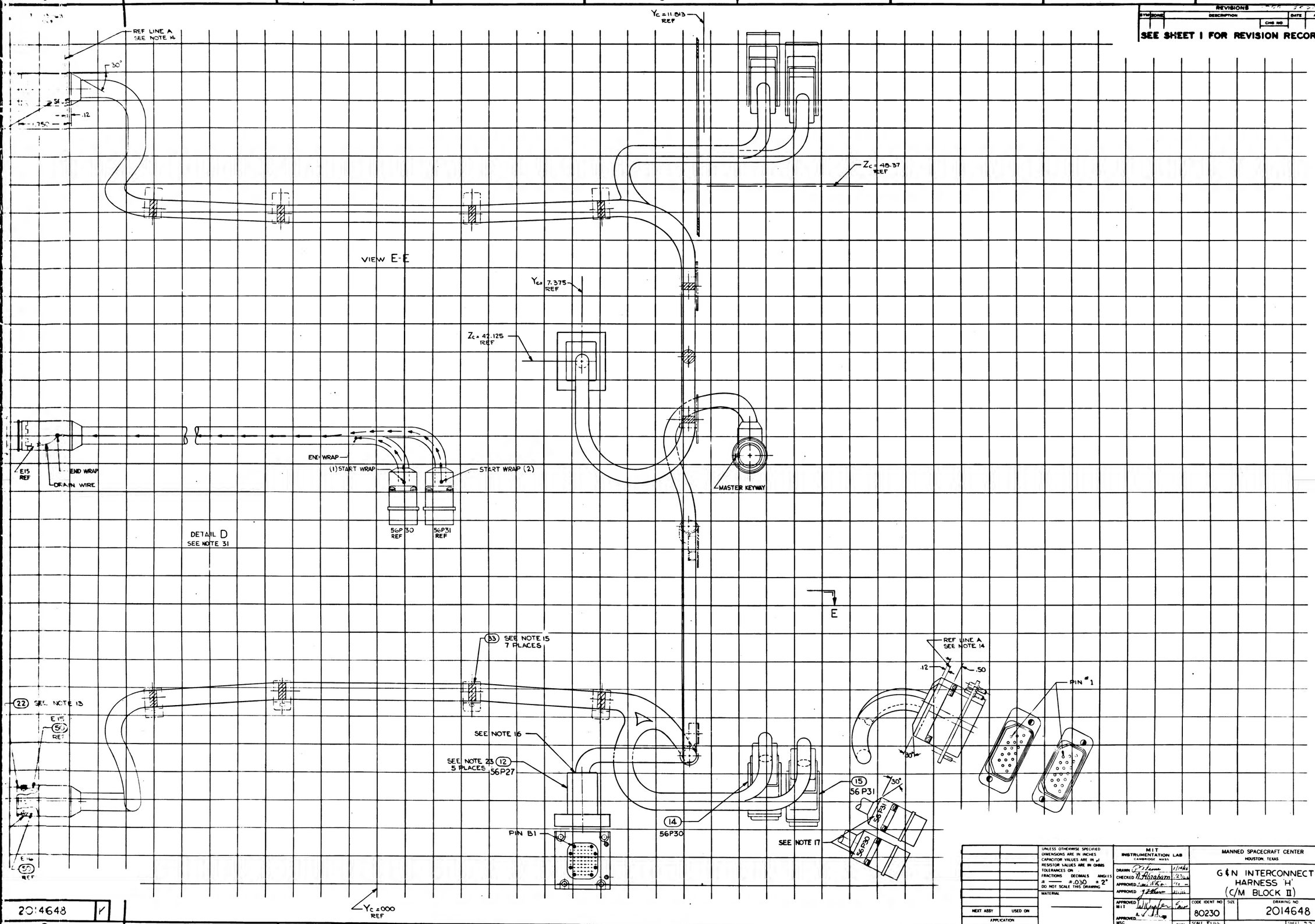
LEAD IDENT	WIRE MATL ITEM	LEAD LG	CIRCUIT PT FROM (A) TO (B)	TERM. AREA NO.	JKT STRIP LG	SHLD STRIP LG	LEAD CUT LG	INS STRIP LG	TIN	NOTE ONE, FIG	ACCESSORY ITEMS	REMARKS
H 189	2		J5-81					.13	NO		19	A
			P30-2					.13	NO			
H 190	2		J5-57					.13	NO		19	A
			P31-2					.13	NO			
H 191	2		J5-56					.13	NO		19	A
			P31-1					.13	NO			
H 192	2		J5-58					.13	NO		19	A
			P30-2					.13	NO			
H 193	2		J5-34					.13	NO		19	A
			P31-2					.13	NO			
H 194	2		J5-35					.13	NO		19	A
			P31-1					.13	NO			
H 196	2		J5-60					.13	NO		19	
			P30-4					.13	NO		18	
H 197	2		J5-84					.13	NO		19	
			P31-4					.13	NO		18	
H 198	2		J5-31					.13	NO		19	A
			P30-2					.13	NO		18	
H 199	2		J5-15					.13	NO		19	A
			P31-2					.13	NO		18	
H 200	2		J5-5					.13	NO		19	A
			P31-1					.13	NO		18	
H 201	3		P25-14					.13	NO		19	
			P27-F5					.22	NO		20	

SIZE	CODE IDENT NO.	
A	80230	2014648
SCALE-NONE	REV LTR K	SHEET 31 OF 32

MIL 2084 9-65

REVISIONS					
SYM	ZONE	DESCRIPTION	CHG NO	DATE	APPD

SEE SHEET 1 FOR REVISION RECORD



2014648 K

UNLESS OTHERWISE SPECIFIED
DIMENSIONS ARE IN INCHES
CAPACITOR VALUES ARE IN μf
RESISTOR VALUES ARE IN OHMS
TOLERANCES ON
FRACTIONS DECIMALS ANGLES
± ± .030 ± 2°
DO NOT SCALE THIS DRAWING

MATERIAL

NEXT ASSY | USED ON
APPLICATION

MIT INSTRUMENTATION LAB
CAMBRIDGE MASS

DRAWN | DATE
CHECKED | DATE
APPROVED | DATE
APPROVED MIT | DATE
APPROVED MSC | DATE

MANNED SPACECRAFT CENTER
HOUSTON, TEXAS

G&N INTERCONNECT
HARNESS 'H'
(C/M BLOCK II)

CODE IDENT NO 80230 | SIZE | DRAWING NO 2014648

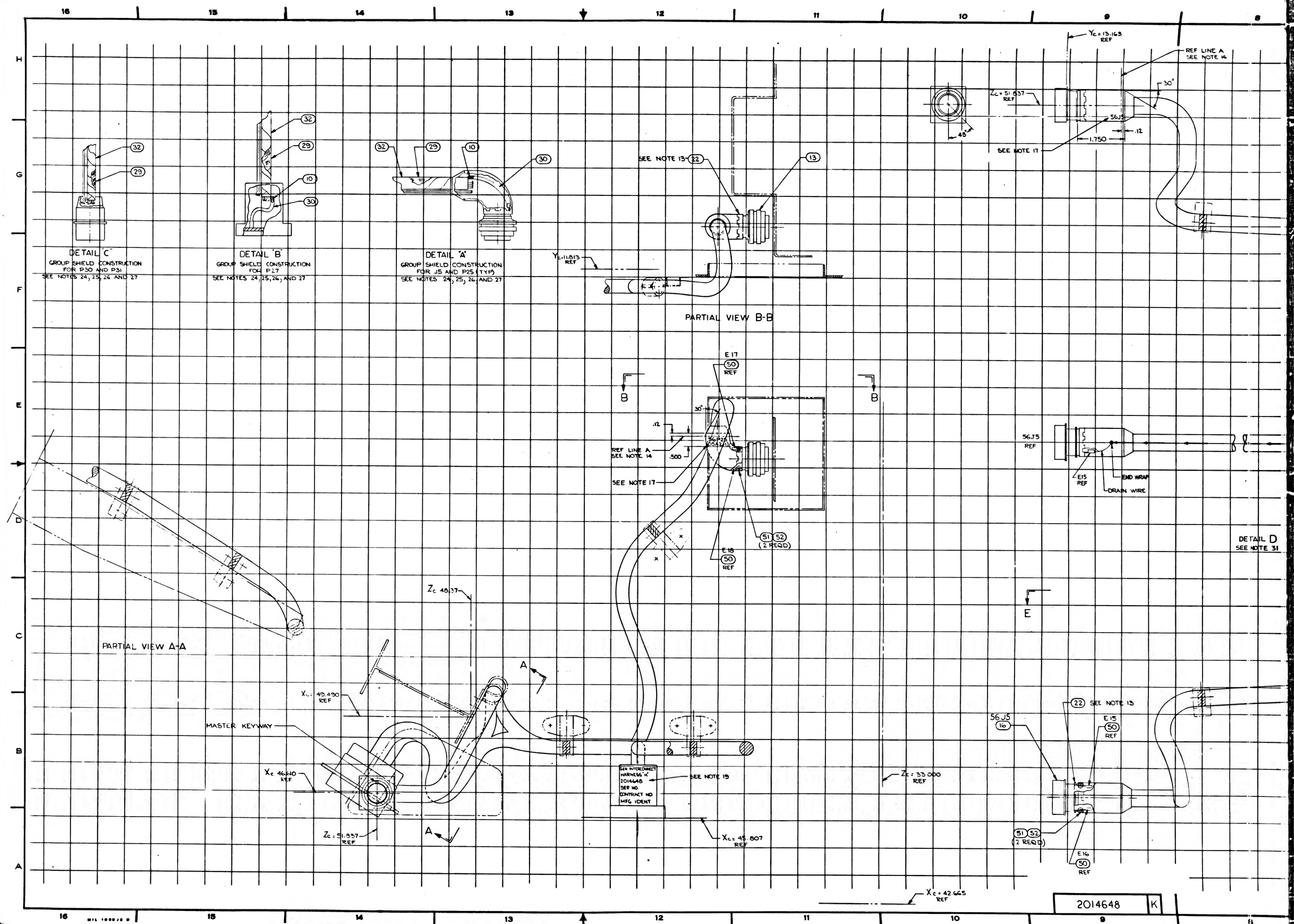
SCALE FULL | SHEET 32 OF 32

2-A-2014648

2014648

2014648

SOV6648


DETAIL "C"
GROUP SHIELD CONSTRUCTION FOR P30 AND P31
SEE NOTES 24, 25, 26 AND 27
DETAIL "B"
GROUP SHIELD CONSTRUCTION FOR P27
SEE NOTES 24, 25, 26, AND 27
DETAIL "A"
GROUP SHIELD CONSTRUCTION FOR J5 AND P25 (TYP)
SEE NOTES 24, 25, 26, AND 27
PARTIAL VIEW B-B
PARTIAL VIEW A-A
DETAIL D
SEE NOTE 31
SEE NOTE 13
SEE NOTE 17
REF LINE A SEE NOTE 14
MASTER KEYWAY
SEE NOTE 19
SEN INTERCONNECT HARNESS W/ 2014648 SER NO CONTRACT NO MFG IDENT
END WRAP
DRAIN WIRE
2014648
K

15/2014648

APPLICATION		REVISIONS			
NEXT ASSY	USED ON	SYM	DESCRIPTION	DATE	APPROVAL
		F	REPLACES REV(E) WITH CHANGE PER TDRR		
		G	CHANGED PER TDRR 24813		
		(N) H	Revised per TDRR 25306	2-4-66	[illegible]
		J	REVISED PER TDRR 25887	11 FEB 66	PLP DRH
		(M) K	REVISED PER TDRR 25888	3 MAR 66	JJJ DRH
		L	REVISED PER TDRR 27743	12-APR -66	B. RWH

REPLACES REV E WITH CHANGE

REV	K	H	L	K	K	K	K	K	K	L	K													
SHEET	21	22	23	24	25	26	27	28	29	30	31	32												
REV STATUS OF SHEETS	REV						L	K	K	K	K	K	K	K	K	K	K	K	K	K	K	K	K	K
	SHEET						1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16	17	18	19	20

AC ELECTRONICS DIVISION
GENERAL MOTORS CORP. MILWAUKEE WIS.

MANNED
SPACECRAFT CENTER
HOUSTON, TEXAS

DRAWN [illegible] DATE 9 DEC '65
CHECKED W. Diehl 9 DEC. 65
APPROVAL E. PETERSON 10 DEC. 65
APPROVAL [illegible] 10 DEC 1965

G & N INTERCONNECT HARNESS "H"

(C/M, BLOCK II)

NASA APPROVAL A. C. MELZGER
MIT APPROVAL [illegible]

CODE IDENT NO.	SIZE		REV
80230	A	2014648	L

CONTRACT NAS9-497 | SCALE | SHEET 1 OF 32

NOTE NUMBER	GENERAL NOTES DESCRIPTION
1	SHIELD TERMINATION FIGURES ARE PER ND1002071 FOR FIG. 6A, 6B AND ND 1002032 FOR FIGURE 7.
2	INTERPRET DRAWING IN ACCORDANCE WITH STANDARDS PRESCRIBED BY MIL-D-70327.
3	INTERCONNECT LIST FOR THIS HARNESS IS 2014678.
4	PARTIAL CIRCUIT POINTS ARE SHOWN. PREFIX WITH UNIT NUMBER 56 FOR COMPLETE CIRCUIT POINT
5	THE SUFFIX LETTER OF A CONDUCTOR IDENTIFICATION NUMBER IDENTIFIES A SHIELD LEAD, COLOR, OR MARKED LETTER. A - FROM END OF SHIELD B - TO END OF SHIELD G - GREEN K - BLACK L - BLUE N - BROWN R - RED W - WHITE Y - YELLOW
6	ASTERISK DENOTES LOWER CASE LETTER
7	GRID MODULE ON PICTURE SHEET IS 1 INCH TRUE POSITION
8	UNLESS OTHERWISE SPECIFIED FEATURE CENTERLINES ON PICTURE SHEET ARE LOCATED WITHIN + OR - .25. ENDS OF HOOKUP WIRES OR ACCESSORIES ARE LOCATED WITHIN .12.
9	VENDOR ITEM - SEE SOURCE CONTROL OR SPECIFICATION CONTROL DRAWING.
10	CRIMP CONTACTS PER ND1002032.

MIL 2084 9-65

NOTE NUMBER	GENERAL NOTES DESCRIPTION
11	ALL UNUSED CONTACT CAVITIES SHALL BE FILLED WITH A CONTACT OR CONTACT AND SEALING PLUG AS FOLLOWS CONNECTOR 56J5 AND P25 USE ITEM NUMBERS 19 AND 24. CONNECTOR 56P27, USE ITEM NUMBER 20. CONNECTOR 56P30, AND 31 USE ITEM NUMBERS 18 AND 23.
12	LACE HARNESS PER ND1002032 USING ITEM NUMBER 40.
13	A SMALL QUANTITY OF POTTING COMPOUND MUST BE PUT BETWEEN THE THREADED PORTION OF CONNECTOR AND SILICONE RUBBER GROMMET TO SEAL AND BOND RING TO CONNECTOR PRIOR TO POTTING.
14	ALL SHIELDED TERMINATIONS SHALL BE LOCATED BELOW REFERENCE LINE A. THERE SHALL BE NO EXPOSED CONDUCTORS AT THE SURFACE OF THE POTTING COMPOUND.
15	BEFORE LACING HARNESS, APPLY 2 TURNS OF TAPE TO INDICATE CABLE CLAMP LOCATION.
16	WRAP TAPE AROUND HARNESS IN AREA SHOWN AS REQUIRED TO BUILD UP DIAMETER TO FIT SHELL HOLE.
17	MARK CONNECTOR WITH REFERENCE DESIGNATION AS SHOWN .12 HIGH, BLACK, HOT IMPRESSION STAMPING PERND1002019, CENTRALIZE.
19	MARK CHARACTERS .12 HIGH, BLACK, PER ND1002019, SERIALIZE PER ND1002023.
20	CONTINUITY TEST PER CONDUCTOR CHART. RESISTANCE SHALL BE LESS THAN 1/2 OHM. TEST PER MIL-STD-202, METHOD 303.

MIL 2084 9-65

NOTE NUMBER	GENERAL NOTES DESCRIPTION
21	INSULATION RESISTANCE SHALL BE GREATER THAN 100 MEGOHMS WITH 500 VDC APPLIED BETWEEN A. THE ASSEMBLY PINS AND STRUCTURE GROUND, WITH THE EXCEPTION OF THOSE PINS ELECTRICALLY CONNECTED TO STRUCTURE GROUND AND THOSE PINS SPECIFIED IN PAR. B. B. EACH PIN AND ALL OTHER PINS NOT ELECTRICALLY CONNECTED, INCLUDING ALL SPARE PINS. TEST PER MIL-STD-202, METHOD 302, EXCEPT ELECTRIFICATION TIME NOT APPLICABLE. SHORT CIRCUIT CURRENT LIMITED TO 15 MILLIAMPS.
22	PRESEAL BACK OF CONNECTOR P27 PRIOR TO ENCAPSULATION PER ND1002187 TYPE III USING ITEMS 36, 37, 38, AND 39.
23	ENCAPSULATE BACK OF CONNECTORS PER ND1002236 USING ITEMS 34 AND 35.
24	CONDUCTORS LISTED WITH AN A OR B IN THE REMARKS COLUMN ARE TO BE GROUP SHIELDED PER DETAILS A, B AND C OF THE CONFIGURATION DRAWING.
25	GROUP SHIELDING - THREAD ONE CONTINUOUS LENGTH OF GROUND WIRE, ITEM 10, THROUGH CENTER OF EMI/RFI SHIELDING TAPE, ITEM 29. ALLOW 6 INCHES OF GROUND WIRE TO EXTEND BEYOND ENDS OF SHIELDING TAPE. WRAP CABLE WITH ONE CONTINUOUS LENGTH OF PREPARED SHIELDING. SUCCESSIVE TURNS SHALL OVERLAP BY APPROXIMATELY 1/2 THE WIDTH OF THE TAPE, WITH A MINIMUM OF RIDGES AND FOLDS.
26	COMPLETELY COVER SHIELD WITH ONE CONTINUOUS WRAP OF INSULATION TAPE, ITEM 32. SUCCESSIVE TURNS SHALL OVERLAP BY APPROXIMATELY 1/2 THE WIDTH OF THE TAPE, WITH A MINIMUM OF RIDGES AND FOLDS. WRAP TAPE IN OPPOSITE DIRECTION TO SHIELD WRAP.

MIL 2084 9-65

NOTE NUMBER	GENERAL NOTES DESCRIPTION
27	ASSEMBLE INSULATION TUBING, ITEM 30, OVER GROUND WIRE AS REQUIRED TO REACH TERMINATION. ASSEMBLE SHRINK SLEEVING AS SHOWN.
28	DELETED
29	DELETED
30	ASSEMBLE A LENGTH OF WIRE BRAID, ITEM 57, OVER CONDUCTORS H135, H136, AND H137. ALLOW 1.50 INCHES OF LEAD TO EXTEND BEYOND BRAID. COVER BRAID WITH TEFLON TAPE, ITEM 32, PER NOTE 26. ALLOW .25 INCH OF BRAID TO EXTEND BEYOND TAPE. FOLD BRAID OVER TAPE AND TERMINATE PER ND1002071, FIG. 6B.
31	NUMBERS INDICATE SEQUENCE IN WHICH GROUP SHIELD A IS TO BE WRAPPED. CUT DRAIN WIRE BACK 1/2 INCH WITHIN SHIELD WRAP AT P30 AND P31 ENDS.
32	PERFORM WORKMANSHIP VIBRATION A. SINUSOIDAL SWEEP AT 3.5 G RMS. LIMITED TO 0.3 INCH PEAK TO PEAK DISPLACEMENT, FROM 10 TO 2000 CPS AT A RATE OF 4 OCTAVES PER MINUTE. B. VIBRATION ALONG THE X AXIS OF THE SPACE CRAFT. C. MONITOR FOR DISCONTINUITIES OF 10 MICRO SECONDS OR GREATER DURING VIBRATION. D. COMPLETE CONTINUITY AND INSULATION RESISTANCE TESTING MUST BE ACCOMPLISHED AFTER VIBRATION.

MIL 2084 9-65

NOTE NUMBER — GENERAL NOTES

DESCRIPTION

LEAD TOLERANCE CHART

	LEAD LG	JKT STRIP LG	SHIELD STRIP LG	LEAD CUT LG	INS STRIP LG
UNDER 3 INCHES	+ .12-.00	+.06-.06	+.06-.06	+.06-.06	+.06-.00
3 INCH TO 3 FT	+ .50-.00	+.25-.25	+.25-.25	+.25-.25	
3 FT TO 10 FT	+1.00-.00				
10 FT AND OVER	+2.00-.00				

SIZE	CODE IDENT NO.		
A	80230	2014648	
SCALE-NONE	REV LTR K	SHEET 6 OF 32	

MIL 2084 9-65

SEE NOTE — LIST OF MATERIALS

NUMBER	ITEM	QTY	PART NO.	DESCRIPTION
	1			DELETED
	2	1	2014648-002	WIRE PER 1010789-006, 22 AWG, YEL, 240 FT TOT LG
	3	1	2014648-003	WIRE PER 1010789-016, 26 AWG, YEL, 170 FT TOT LG
	4	1	2014648-004	WIRE PER 1010789-008, 22 AWG, YEL, RED, 10 FT TOT LG
	5	1	2014648-005	WIRE PER 1010789-017, 26 AWG, YEL, RED, 8 FT TOT LG
	6			DELETED
	7	1	2014648-007	WIRE PER 1010789-019, 26 AWG, YEL, RED, GRN, BRN, 5 FT TOT LG
	8	1	2014648-008	WIRE PER 1010789-015, 26 AWG, YEL, RED, YEL JKT, 20 FT TOT LG
	9	1	2014648-009	WIRE PER 1010789-024, 26 AWG, BLK, 5 FT TOT LG
	10	1	2014648-010	WIRE PER QQ-W-343, TYPE C, CLASS C, 22 AWG, 30 FT TOT LG
	11	1	2014648-011	WIRE PER 1010789-002, 24 AWG, BLK, 5 FT TOT LG
	12	1	2014748-011	CONNECTOR, PLUG, ELECTRICAL, (56P27)
9	13	1	1010929-003	CONNECTOR, PLUG, ELECTRICAL, (56P25)
9	14	1	1010921- 1	CONNECTOR, PLUG, ELECTRICAL, (56P30)

SIZE	CODE IDENT NO.		
A	80230	2014648	
SCALE-NONE	REV LTR K	SHEET 7 OF 32	

MIL 2084 9-65

SEE NOTE — LIST OF MATERIALS

NUMBER	ITEM	QTY	PART NO.	DESCRIPTION
9	15	1	1010921- 2	CONNECTOR, PLUG, ELECTRICAL, (56P31)
9	16	1	1010930-003	CONNECTOR, RECEPTACLE, ELECTRICAL (56J5)
9	18	36	1010932- 2	CONTACT, PIN
9	19	X	1010770- 2	CONTACT, SOCKET, SUPPLIED WITH CONNECTORS 1010929, AND 1010930.
9	20	56	1010955- 1	CONTACT, MALE
9	21	8	1010955- 2	CONTACT, MALE
	22	2	2014670- 11	ADAPTER, CONNECTOR
9	23	7	1010983- 1	PLUG, PROTECTIVE SEALING
9	24	39	1010958- 1	PLUG, PROTECTIVE SEALING
	25			DELETED
9	29	AR	1010989	TAPE, SHIELDING, EMI/RFI
9	30	AR	1006776- 19	INSULATION SLEEVING
	32	AR	MIL-T-23594	TAPE, TEFLON, TYPE II, 1 INCH WIDE
	33	AR	MIL-T-23594	TAPE, TEFLON, TYPE II, 1/4 INCH WIDE
9	34	AR	1012503	COMPOUND, POTTING, POLYURETHANE
9	35	AR	1012504	PRIMER, METAL PARTS
9	36	AR	1006277	SILICA, PULVERIZED, PYROGENIC
9	37	AR	1008822	COLORANT, EPOXY BASE

SIZE	CODE IDENT NO.		
A	80230	2014648	
SCALE-NONE	REV LTR K	SHEET 8 OF 32	

MIL 2084 9-65

SEE NOTE — LIST OF MATERIALS

NUMBER	ITEM	QTY	PART NO.	DESCRIPTION
9	38	AR	1010661	EPOXY RESIN
9	39	AR	1010679	ADHESIVE ACTIVATOR
9	40	AR	1012507-004	TAPE, LACING AND TYING
	42			DELETED
	43			DELETED
	44			DELETED
	45			DELETED
	46			DELETED
	47			DELETED
	48			DELETED
	49			DELETED
	50	4	MS17182-1	TERMINAL LUG
	51	4	MS35333-69	WASHER, LOCK
9	52	4	1006783- 93	SCREW, BUTTON HD
9	53	13	1010402- 2	SLEEVE, SOLDER
	54			DELETED
	55			DELETED
	56			DELETED

SIZE	CODE IDENT NO.		
A	80230	2014648	
SCALE-NONE	REV LTR K	SHEET 9 OF 32	

MIL 2084 9-65

SEE NOTE

LIST OF MATERIALS

NUMBER	ITEM	QTY	PART NO.	DESCRIPTION
	57	1	2014648-012	WIRE BRAID, QQ-B-575, .12 DIA, 36 AWG, 10 FT TOTAL LENGTH
	58			DELETED
	59	1	1012534- 36	SLEEVING, INSULATION, ELEC, (HEAT SHRINKABLE)

LEAD IDENT	WIRE MATL ITEM	LEAD LG	CIRCUIT PT FROM (A) TO (B)	TERM.JKT AREA NO.	STRIP LG	SHLD STRIP LG	LEAD CUT LG	INS STRIP LG	TIN	NOTE ONE, FIG	ACCESSORY ITEMS	REMARKS
H 1			DELETED									
H 2			DELETED									
H 3	2		P27-A6 P30-9					.18 .13	NO NO		20	
H 4	2		P27-A7 P30-9					.18 .13	NO NO		20	
H 5	2		P27-B6 P30-9					.18 .13	NO NO		20	
H 6	2		P27-B7 P30-9					.18 .13	NO NO		20 18	
H 7	2		P27-C6 P30-10					.18 .13	NO NO		20	
H 8	2		P27-C7 P30-10					.18 .13	NO NO		20	
H 9	2		P27-D6 P30-10					.18 .13	NO NO		20 18	
H 10			DELETED									
H 11			DELETED									
H 12	2		P27-A3 P31-9					.18 .13	NO NO		20	

LEAD IDENT	WIRE MATL ITEM	LEAD LG	CIRCUIT PT FROM (A) TO (B)	TERM.JKT AREA NO.	STRIP LG	SHLD STRIP LG	LEAD CUT LG	INS STRIP LG	TIN	NOTE ONE, FIG	ACCESSORY ITEMS	REMARKS
H 13	2		P27-A4 P31-9					.18 .13	NO NO		20	
H 14	2		P27-A5 P31-9					.18 .13	NO NO		20	
H 15	2		P27-B4 P31-9					.18 .13	NO NO		20 18	
H 16	2		P27-B5 P31-10					.18 .13	NO NO		20	
H 17	2		P27-C4 P31-10					.18 .13	NO NO		20	
H 18	2		P27-C5 P31-10					.18 .13	NO NO		20 18	
H 19			DELETED									
H 20	2		P27-F7 P30-8					.18 .13	NO NO		20	
H 21	2		P27-G7 P30-8					.18 .13	NO NO		20	
H 22	2		P27-H7 P30-8					.18 .13	NO NO		20 18	
H 23			DELETED									
H 24	2		P27-F8 P31-8					.18 .13	NO NO		20	

LEAD IDENT	WIRE MATL ITEM	LEAD LG	CIRCUIT PT FROM (A) TO (B)	TERM.JKT AREA NO.	STRIP LG	SHLD STRIP LG	LEAD CUT LG	INS STRIP LG	TIN	NOTE ONE, FIG	ACCESSORY ITEMS	REMARKS
H 25	2		P27-G8 P31-8					.18 .13	NO NO		20	
H 26	2		P27-H8 P31-8					.18 .13	NO NO		20 18	
H 27			DELETED									
H 28			DELETED									
H 29			DELETED									
H 30			DELETED									
H 31			DELETED									
H 32			DELETED									
H 33	2		P27-B8 P30-16					.18 .13	NO NO		20	
H 34	2		P27-B9 P31-16					.18 .13	NO NO		20	
H 35	2		P27-C8 P30-16					.18 .13	NO NO		20	
H 36	2		P27-C9 P31-16					.18 .13	NO NO		20	

LEAD IDENT	WIRE MATL ITEM	LEAD LG	CIRCUIT PT FROM (A) TO (B)	TERM. AREA NO.	JKT STRIP LG	SHLD STRIP LG	LEAD CUT LG	INS STRIP LG	TIN	NOTE ONE, FIG	ACCESSORY ITEMS	REMARKS
H 37	2		P27-D7 P31-15					.18 .13	NO NO		20	
H 38	2		P27-D8 P31-15					.18 .13	NO NO		20	
H 39	2		P27-D9 P30-15					.18 .13	NO NO		20	
H 40	2		P27-F9 P30-15					.18 .13	NO NO		20	
H 41	2		P27-G9 P30-3					.18 .13	NO NO		20	
H 42	2		P27-H9 P31-3					.18 .13	NO NO		20	
H 43			DELETED									
H 44			DELETED									
H 45			DELETED									
H 46			DELETED									
H 47			DELETED									
H 47G			DELETED									

SIZE	CODE IDENT NO.	
A	80230	2014648
SCALE-NONE	REV LTR K	SHEET 14 OF 32

MIL 2084 9-65

LEAD IDENT	WIRE MATL ITEM	LEAD LG	CIRCUIT PT FROM (A) TO (B)	TERM. AREA NO.	JKT STRIP LG	SHLD STRIP LG	LEAD CUT LG	INS STRIP LG	TIN	NOTE ONE, FIG	ACCESSORY ITEMS	REMARKS
H 47R			DELETED									
H 47Y			DELETED									
H 48			DELETED									
H 48G			DELETED									
H 48R			DELETED									
H 48Y			DELETED									
H 49			DELETED									
H 49G			DELETED									
H 49R			DELETED									
H 49Y			DELETED									
H 50			DELETED									
H 50G			DELETED									

SIZE	CODE IDENT NO.	
A	80230	2014648
SCALE-NONE	REV LTR K	SHEET 15 OF 32

MIL 2084 9-65

LEAD IDENT	WIRE MATL ITEM	LEAD LG	CIRCUIT PT FROM (A) TO (B)	TERM. AREA NO.	JKT STRIP LG	SHLD STRIP LG	LEAD CUT LG	INS STRIP LG	TIN	NOTE ONE, FIG	ACCESSORY ITEMS	REMARKS
H 50R			DELETED									
H 50Y			DELETED									
H 51			DELETED									
H 52			DELETED									
H 53			DELETED									
H 54			DELETED									
H 55			DELETED									
H 55G			DELETED									
H 55R			DELETED									
H 55Y			DELETED									
H 56			DELETED									
H 56G			DELETED									

SIZE	CODE IDENT NO.	
A	80230	2014648
SCALE-NONE	REV LTR K	SHEET 16 OF 32

MIL 2084 9-65

LEAD IDENT	WIRE MATL ITEM	LEAD LG	CIRCUIT PT FROM (A) TO (B)	TERM. AREA NO.	JKT STRIP LG	SHLD STRIP LG	LEAD CUT LG	INS STRIP LG	TIN	NOTE ONE, FIG	ACCESSORY ITEMS	REMARKS
H 56R			DELETED									
H 56Y			DELETED									
H 57			DELETED									
H 57G			DELETED									
H 57R			DELETED									
H 57Y			DELETED									
H 58			DELETED									
H 58G			DELETED									
H 58R			DELETED									
H 58Y			DELETED									
H 59			DELETED									
H 59G			DELETED									

SIZE	CODE IDENT NO.	
A	80230	2014648
SCALE-NONE	REV LTR K	SHEET 17 OF 32

MIL 2084 9-65

LEAD IDENT	WIRE MATL ITEM	LEAD LG	CIRCUIT PT FROM (A) TO (B)	TERM. AREA NO.	JKT STRIP LG	SHLD STRIP LG	LEAD CUT LG	INS STRIP LG	TIN	NOTE ONE, FIG	ACCESSORY ITEMS	REMARKS
H 59R			DELETED									
H 59Y			DELETED									
H 61			DELETED									
H 62			DELETED									
H 63R			DELETED									
H 63Y			DELETED									
H 67	5											
H 67R			P25-83					.13	NO		19	
			P27-K5					.18	NO		21	
H 67Y			P25-84					.13	NO		19	
			P27-K4					.18	NO		21	
H 68	7											
H 68G			P25-55					.13	NO		19	
			P27-H4					.22	NO			
H 68N			P25-53					.13	NO		19	
			P27-H4					.22	NO		20	

SIZE	CODE IDENT NO.	
A	80230	2014648
SCALE-NONE	REV LTR K	SHEET 18 OF 32

MIL 2084 9-65

LEAD IDENT	WIRE MATL ITEM	LEAD LG	CIRCUIT PT FROM (A) TO (B)	TERM. AREA NO.	JKT STRIP LG	SHLD STRIP LG	LEAD CUT LG	INS STRIP LG	TIN	NOTE ONE, FIG	ACCESSORY ITEMS	REMARKS
H 68R			P25-31					.13	NO		19	
			P27-H5					.18	NO		21	
H 68Y			P25-54					.13	NO		19	
			P27-G5					.18	NO		21	
H 69	2		P25-57					.13	NO		19	
			P27-G4					.18	NO		20	
H 70	3		J5-62					.13	NO		19	B
			P25-51					.13	NO		19	
H 71	3		J5-63					.13	NO		19	B
			P25-78					.13	NO		19	
H 72	3		J5-38					.13	NO		19	B
			P25-77					.13	NO		19	
H 73	3		J5-40					.13	NO		19	B
			P25-76					.13	NO		19	
H 74	3		J5-39					.13	NO		19	B
			P25-79					.13	NO		19	
H 75	3		J5-64					.13	NO		19	B
			P25-49					.13	NO		19	
H 76	2		J5-66					.13	NO		19	B
			P25-30					.13	NO		19	
H 77	3		J5-65					.13	NO		19	B
			P25-75					.13	NO		19	
H 78	2		J5-41					.13	NO		19	B
			P25-28					.13	NO		19	

SIZE	CODE IDENT NO.	
A	80230	2014648
SCALE-NONE	REV LTR K	SHEET 19 OF 32

MIL 2084 9-65

LEAD IDENT	WIRE MATL ITEM	LEAD LG	CIRCUIT PT FROM (A) TO (B)	TERM. AREA NO.	JKT STRIP LG	SHLD STRIP LG	LEAD CUT LG	INS STRIP LG	TIN	NOTE ONE, FIG	ACCESSORY ITEMS	REMARKS
H 79	2		J5-42					.13	NO		19	B
			P25-48					.13	NO		19	
H 80	3		J5-52					.13	NO		19	B
			P25-2					.13	NO		19	
H 81	3		J5-76					.13	NO		19	B
			P25-9					.13	NO		19	
H 82	3		J5-30					.13	NO		19	B
			P25-22					.13	NO		19	
H 83	3		J5-29					.13	NO		19	B
			P25-41					.13	NO		19	
H 84	3		J5-14					.13	NO		19	B
			P25-66					.13	NO		19	
H 85	3		J5-50					.13	NO		19	B
			P25-3					.13	NO		19	
H 86	3		J5-74					.13	NO		19	B
			P25-10					.13	NO		19	
H 87	3		J5-75					.13	NO		19	B
			P25-23					.13	NO		19	
H 88	3		J5-51					.13	NO		19	B
			P25-42					.13	NO		19	
H 89	3		J5-77					.13	NO		19	B
			P25-67					.13	NO		19	
H 90	3		J5-27					.13	NO		19	B
			P25-12					.13	NO		19	

SIZE	CODE IDENT NO.	
A	80230	2014648
SCALE-NONE	REV LTR K	SHEET 20 OF 32

MIL 2084 9-65

LEAD IDENT	WIRE MATL ITEM	LEAD LG	CIRCUIT PT FROM (A) TO (B)	TERM. AREA NO.	JKT STRIP LG	SHLD STRIP LG	LEAD CUT LG	INS STRIP LG	TIN	NOTE ONE, FIG	ACCESSORY ITEMS	REMARKS
H 91	3		J5-13					.13	NO		19	B
			P25-11					.13	NO		19	
H 92	3		J5-28					.13	NO		19	B
			P25-24					.13	NO		19	
H 93	3		J5-73					.13	NO		19	B
			P25-43					.13	NO		19	
H 94	3		J5-49					.13	NO		19	B
			P25-68					.13	NO		19	
H 95	2		J5-45					.13	NO		19	B
			P25-7					.13	NO		19	
H 96	3		J5-72					.13	NO		19	B
			P25-27					.13	NO		19	
H 97	3		J5-48					.13	NO		19	B
			P25-45					.13	NO		19	
H 98	3		J5-47					.13	NO		19	B
			P25-26					.13	NO		19	
H 99	3		J5-71					.13	NO		19	B
			P25-25					.13	NO		19	
H 100	3		J5-4					.13	NO		19	B
			P25-47					.13	NO		19	
H 101	3		J5-22					.13	NO		19	B
			P25-70					.13	NO		19	
H 102	3		J5-46					.13	NO		19	B
			P25-46					.13	NO		19	

SIZE	CODE IDENT NO.	
A	80230	2014648
SCALE-NONE	REV LTR K	SHEET 21 OF 32

MIL 2084 9-65

LEAD IDENT	WIRE MATL ITEM	LEAD LG	CIRCUIT PT FROM (A) TO (B)	TERM. AREA NO.	JKT STRIP LG	SHLD STRIP LG	LEAD CUT LG	INS STRIP LG	TIN	NOTE ONE, FIG	ACCESSORY ITEMS	REMARKS
H 103	2		J5-7C					.13	NO		19	D
			P25-73					.13	NO		19	
H 104	3		J5-25					.13	NO		19	B
			P25-13					.13	NO		19	
H 105	3		J5-26					.13	NO		19	B
			P25-72					.13	NO		19	
H 106	3		J5-11					.13	NO		19	B
			P25-74					.13	NO		19	
H 107	3		J5-23					.13	NO		19	B
			P25-44					.13	NO		19	
H 108	3		J5-12					.13	NO		19	B
			P25-71					.13	NO		19	
H 109	3		J5-10					.13	NO		19	B
			P25-69					.13	NO		19	
H 110	3		J5-24					.13	NO		19	B
			P25-18					.13	NO		19	
H 111	2		J5-44					.13	NO		19	B
			P25-21					.13	NO		19	
H 112	2		J5-68					.13	NO		19	B
			P25-8					.13	NO		19	
H 113	2		J5-43					.13	NO		19	B
			P25-1					.13	NO		19	
H 120	2		P27-G3					.18	NO		20	
			P30-6					.13	NO		18	

SIZE	CODE IDENT NO.	
A	80230	2014648
SCALE-NONE	REV LTR K	SHEET 22 OF 32

MIL 2084 9-65

LEAD IDENT	WIRE MATL ITEM	LEAD LG	CIRCUIT PT FROM (A) TO (B)	TERM. AREA NO.	JKT STRIP LG	SHLD STRIP LG	LEAD CUT LG	INS STRIP LG	TIN	NOTE ONE, FIG	ACCESSORY ITEMS	REMARKS
H 121	2		P27-G2					.18	NO		20	
			P31-6					.13	NO		18	
H 122			DELETED									
H 123			DELETED									
H 128			DELETED									
H 128G			DELETED									
H 128R			DELETED									
H 128Y			DELETED									
H 129	5											
H 129R			P25-14					.13	NO		19	
			P27-F6					.18	NO		21	
H 129Y			P25-32					.13	NO		19	
			P27-G6					.18	NO		21	
H 130			DELETED									
H 130R			DELETED									

SIZE	CODE IDENT NO.	
A	80230	2014648
SCALE-NONE	REV LTR L	SHEET 23 OF 32

MIL 2084 9-65

LEAD IDENT	WIRE MATL ITEM	LEAD LG	CIRCUIT PT FROM (A) TO (B)	TERM. AREA NO.	JKT STRIP LG	SHLD STRIP LG	LEAD CUT LG	INS STRIP LG	TIN	NOTE ONE, FIG	ACCESSORY ITEMS	REMARKS
H 130Y			DELETED									
H 131	8				1.00	.75				6B	53	
					1.75	1.50				6B	59	
H 131A	11		SHLD H131					.20	NO			
			P27-H2					.18	NO		20	
H 131B			DELETED									
H 131R			P27-K3					.18	NO		21	
			P30-17					.13	NO		18	
H 131Y			P27-H3					.18	NO		21	
			P30-18					.13	NO		18	
H 132	8				1.00	.75				6A	53	
					1.75	1.50				6B	53	
H 132A	11		SHLD H132					.20	NO			
			E16					.19	NO			
H 132B	9		P27-H6					.22	NO			
			SHLD H132					.20	NO			
H 132R			J5-19					.13	NO		19	
			P27-K6					.22	NO			
H 132Y			J5-18					.13	NO		19	
			P27-K7					.22	NO			
H 133	8				1.00	.75				6A	53	
					1.75	1.50				6B	53	

SIZE	CODE IDENT NO.	
A	80230	2014648
SCALE-NONE	REV LTR K	SHEET 24 OF 32

MIL 2084 9-65

LEAD IDENT	WIRE MATL ITEM	LEAD LG	CIRCUIT PT FROM (A) TO (B)	TERM. AREA NO.	JKT STRIP LG	SHLD STRIP LG	LEAD CUT LG	INS STRIP LG	TIN	NOTE ONE, FIG	ACCESSORY ITEMS	REMARKS
H 133A	11		SHLD H133					.20	NO			
			E17					.19	NO			
H 133B	9		P27-H6					.22	NO		20	
			SHLD H133					.20	NO			
H 133R			P25-38					.13	NO		19	
			P27-K6					.22	NO		20	
H 133Y			P25-40					.13	NO		19	
			P27-K7					.22	NO		20	
H 134	8				1.00	.75				6A	53	
					1.75	1.50				6A	53	
H 134A	11		SHLD H134					.20	NO			
			E16					.19	NO			
H 134B	11		E17					.19	NO			
			SHLD H134					.20	NO			
H 134R			J5-7					.13	NO		19	
			P25-5					.13	NO		19	
H 134Y			J5-8					.13	NO		19	
			P25-4					.13	NO		19	
H 135	4									6A	53	SEE NOTE 30
										6B	53	
H 135A	11		SHLD H135					.20	NO			
			E17					.19	NO		50	
H 135B	11		P31-11					.13	NO			
			SHLD H135					.20	NO			

SIZE	CODE IDENT NO.	
A	80230	2014648
SCALE-NONE	REV LTR K	SHEET 25 OF 32

MIL 2084 9-65

G AND N INTERCONNECT 2014648 K

LEAD IDENT	WIRE MATL ITEM	LEAD LG	CIRCUIT PT FROM (A) TO (B)	TERM.JKT AREA NO.	STRIP LG	SHLD STRIP LG	LEAD CUT LG	INS STRIP LG	TIN	NOTE ONE, FIG	ACCESSORY ITEMS	REMARKS
H 135R			P25-62					.13	NO		19	
			P31-17					.13	NO			
H 135Y			P25-63					.13	NO		19	
			P31-18					.13	NO			
H 136	4									6A	53	SEE NOTE 30
										6B	53	
H 136A	11		SHLD H136					.20	NO			
			E18					.19	NO			
H 136B	11		P31-11					.13	NO			
			SHLD H136					.20	NO			
H 136R			P25-64					.13	NO		19	
			P31-17					.13	NO			
H 136Y			P25-65					.13	NO		19	
			P31-18					.13	NO			
H 137	4									6A	53	SEE NOTE 30
										6B	53	
H 137A	11		SHLD H137					.20	NO			
			E16					.19	NO		50	
H 137B	11		P31-11					.13	NO		18	
			SHLD H137					.20	NO			
H 137R			J5-9					.13	NO		19	
			P31-17					.13	NO		18	
H 137Y			J5-2					.13	NO		19	
			P31-18					.13	NO		18	

SIZE	CODE IDENT NO.	
A	80230	2014648
SCALE-NONE	REV LTR K	SHEET 26 OF 32

MIL 2084 9-65

G AND N INTERCONNECT 2014648 K

LEAD IDENT	WIRE MATL ITEM	LEAD LG	CIRCUIT PT FROM (A) TO (B)	TERM.JKT AREA NO.	STRIP LG	SHLD STRIP LG	LEAD CUT LG	INS STRIP LG	TIN	NOTE ONE, FIG	ACCESSORY ITEMS	REMARKS
H 138	10		E15									
			NONE					.19	NO			A
H 139	10		E15									
			E18					.19	NO		50	B
								.19	NO		50	
H 141			DELETED									
H 142			DELETED									
H 143			DELETED									
H 144			DELETED									
H 145			DELETED									
H 146			DELETED									
H 147			DELETED									
H 148			DELETED									
H 149			DELETED									
H 150			DELETED									

SIZE	CODE IDENT NO.	
A	80230	2014648
SCALE-NONE	REV LTR K	SHEET 27 OF 32

MIL 2084 9-65

G AND N INTERCONNECT 2014648 K

LEAD IDENT	WIRE MATL ITEM	LEAD LG	CIRCUIT PT FROM (A) TO (B)	TERM.JKT AREA NO.	STRIP LG	SHLD STRIP LG	LEAD CUT LG	INS STRIP LG	TIN	NOTE ONE, FIG	ACCESSORY ITEMS	REMARKS
H 151			DELETED									
H 152			DELETED									
H 153			DELETED									
H 154			DELETED									
H 157	2		P30-4					.13	NO			
			P31-4					.13	NO			
H 158	2		P30-14					.13	NO			
			P31-14					.13	NO			
H 159	2		P30-14					.13	NO			
			P31-14					.13	NO			
H 160	2		P30-15					.13	NO			
			P31-15					.13	NO			
H 161	2		P30-15					.13	NO			
			P31-15					.13	NO			
H 162	2		P30-16					.13	NO			
			P31-16					.13	NO			
H 163	2		P30-16					.13	NO		18	
			P31-16					.13	NO		18	
H 164	2		P30-3					.13	NO		18	
			P30-15					.13	NO		18	

SIZE	CODE IDENT NO.	
A	80230	2014648
SCALE-NONE	REV LTR K	SHEET 28 OF 32

MIL 2084 9-65

G AND N INTERCONNECT 2014648 K

LEAD IDENT	WIRE MATL ITEM	LEAD LG	CIRCUIT PT FROM (A) TO (B)	TERM.JKT AREA NO.	STRIP LG	SHLD STRIP LG	LEAD CUT LG	INS STRIP LG	TIN	NOTE ONE, FIG	ACCESSORY ITEMS	REMARKS
H 165	2		P31-3					.13	NO		18	
			P31-15					.13	NO		18	
H 166	2		P30-1					.13	NO			
			P31-1					.13	NO			A
H 167	2		P30-1					.13	NO			
			P31-1					.13	NO			A
H 168	2		P27-B3					.18	NO		20	
			P30-7					.13	NO			
H 169	2		P27-B2					.18	NO		20	
			P31-7					.13	NO			
H 170	2		P27-B1					.18	NO		20	
			P30-14					.13	NO			
H 171	2		P27-C3					.18	NO		20	
			P30-7					.13	NO			
H 172	2		P27-C2					.18	NO		20	
			P31-7					.13	NO			
H 173	2		P27-C1					.18	NO		20	
			P30-14					.13	NO		18	
H 174	2		P27-D3					.18	NO		20	
			P30-7					.13	NO			
H 175	2		P27-D2					.18	NO		20	
			P31-7					.13	NO			
H 176	2		P27-D1					.18	NO		20	
			P31-14					.13	NO			

SIZE	CODE IDENT NO.	
A	80230	2014648
SCALE-NONE	REV LTR K	SHEET 29 OF 32

MIL 2084 9-65

LEAD IDENT	WIRE MATL ITEM	LEAD LG	CIRCUIT PT FROM (A) TO (B)	TERM.JKT AREA NO.	TERM.JKT STRIP LG	SHLD STRIP LG	LEAD CUT LG	INS STRIP LG	TIN	NOTE ONE, FIG	ACCESSORY ITEMS	REMARKS
H 177	2		P27-F3					.18	NO		20	
			P30-7					.13	NO		18	
H 178	2		P27-F2					.18	NO		20	
			P31-7					.13	NO		18	
H 179	2		P27-F1					.18	NO		20	
			P31-14					.13	NO		18	
H 180	2		J5-53					.13	NO		19	A
			P30-2					.13	NO			
H 181	2		J5-78					.13	NO		19	A
			P31-2					.13	NO			
H 182	2		J5-54					.13	NO		19	A
			P30-1					.13	NO			
H 183	2		J5-79					.13	NO		19	A
			P30-2					.13	NO			
H 184	2		J5-80					.13	NO		19	A
			P31-2					.13	NO			
H 185	2		J5-55					.13	NO		19	A
			P30-1					.13	NO			
H 186	2		J5-33					.13	NO		19	A
			P30-2					.13	NO			
H 187	2		J5-32					.13	NO		19	A
			P31-2					.13	NO			
H 188	2		J5-16					.13	NO		19	A
			P30-1					.13	NO		18	

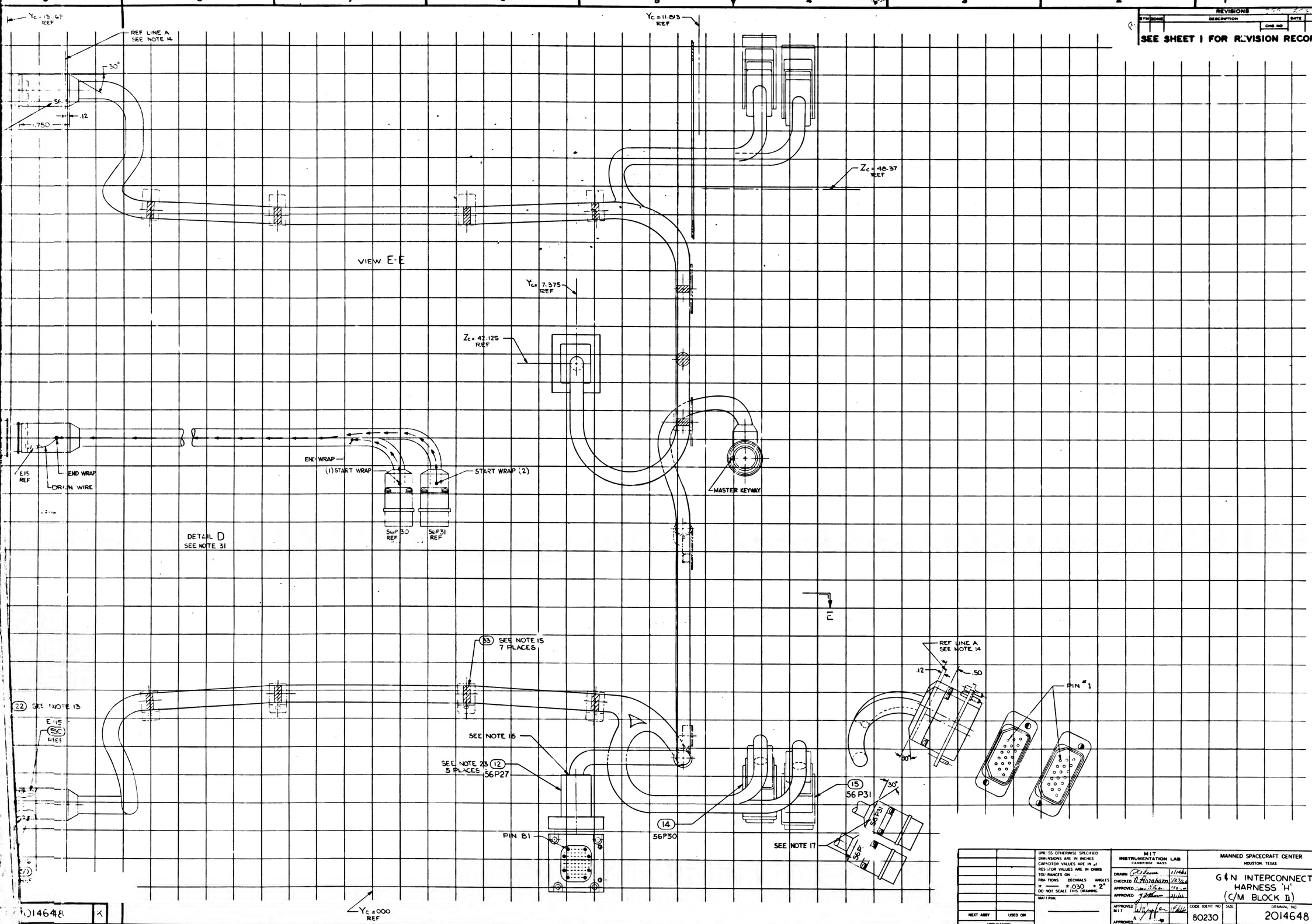
SIZE	CODE IDENT NO.	
A	80230	2014648
SCALE-NONE	REV LTR K	SHEET 30 OF 32

MIL 2084 9-65

LEAD IDENT	WIRE MATL ITEM	LEAD LG	CIRCUIT PT FROM (A) TO (B)	TERM.JKT AREA NO.	TERM.JKT STRIP LG	SHLD STRIP LG	LEAD CUT LG	INS STRIP LG	TIN	NOTE ONE, FIG	ACCESSORY ITEMS	REMARKS
H 189	2		J5-81					.13	NO		19	A
			P30-2					.13	NO			
H 190	2		J5-57					.13	NO		19	A
			P31-2					.13	NO			
H 191	2		J5-56					.13	NO		19	A
			P31-1					.13	NO			
H 192	2		J5-58					.13	NO		19	A
			P30-2					.13	NO			
H 193	2		J5-34					.13	NO		19	A
			P31-2					.13	NO			
H 194	2		J5-35					.13	NO		19	A
			P31-1					.13	NO			
H 196	2		J5-60					.13	NO		19	
			P30-4					.13	NO		18	
H 197	2		J5-84					.13	NO		19	
			P31-4					.13	NO		18	
H 198	2		J5-31					.13	NO		19	A
			P30-2					.13	NO		18	
H 199	2		J5-15					.13	NO		19	A
			P31-2					.13	NO		18	
H 200	2		J5-5					.13	NO		19	A
			P31-1					.13	NO		18	
H 201	3		P25-15					.13	NO		19	
			P27-F5					.22	NO		20	

SIZE	CODE IDENT NO.	
A	80230	2014648
SCALE-NONE	REV LTR L	SHEET 31 OF 32

MIL 2084 9-65



REVISIONS

SYM	ZONE	DESCRIPTION	CHG NO	DATE	APPD

SEE SHEET 1 FOR REVISION RECORD

NEXT ASSY	USED ON
APPLICATION	

UNLESS OTHERWISE SPECIFIED DIMENSIONS ARE IN INCHES
CAPACITOR VALUES ARE IN μf
RESISTOR VALUES ARE IN OHMS
TOLERANCES ON:
FRACTIONS ± ___ DECIMALS ± .030 ANGLES ± 2°
DO NOT SCALE THIS DRAWING
MATERIAL

MIT INSTRUMENTATION LAB CAMBRIDGE MASS

DRAWN	R. Hume	11/1/66
CHECKED	D. Abraham	12/1/66
APPROVED	[illegible]	12/1/66
APPROVED	[illegible]	12/1/66
APPROVED MIT	[illegible]	12/1/66
APPROVED MSC		DATE

MANNED SPACECRAFT CENTER HOUSTON TEXAS

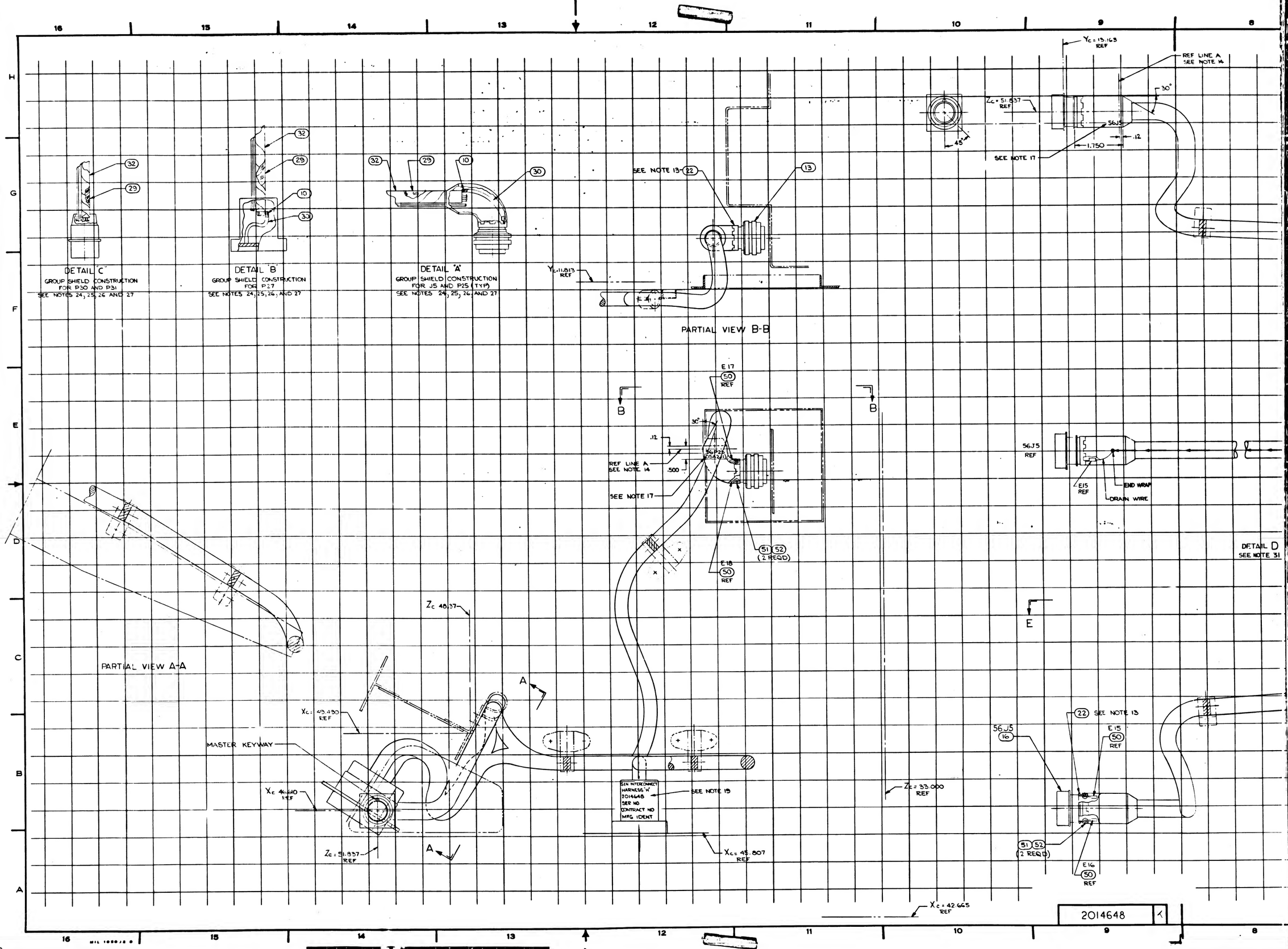
G & N INTERCONNECT HARNESS 'H' (C/M BLOCK II)

CODE IDENT NO 80230 | SIZE | DRAWING NO 2014648 | SCALE FULL | SHEET 32 OF 2

2014648 K

2014648 B C D E F G H

2-2014648


DETAIL C
GROUP SHIELD CONSTRUCTION FOR P30 AND P31
SEE NOTES 24, 25, 26 AND 27
DETAIL B
GROUP SHIELD CONSTRUCTION FOR P27
SEE NOTES 24, 25, 26, AND 27
DETAIL A
GROUP SHIELD CONSTRUCTION FOR J5 AND P25 (TYP)
SEE NOTES 24, 25, 26, AND 27
PARTIAL VIEW B-B
PARTIAL VIEW A-A
DETAIL D
SEE NOTE 31
SEE NOTE 13
SEE NOTE 17
REF LINE A SEE NOTE 14
MASTER KEYWAY
SIN INTERCONNECT HARNESS 'K' 2014648 SER NO CONTRACT NO MFG. IDENT
SEE NOTE 19
END WRAP
DRAIN WIRE
2014648

1/2014648

APPLICATION		REVISIONS			
NEXT ASSY	USED ON	SYM	DESCRIPTION	DATE	APPROVAL
		F	REPLACES REV(E) WITH CHANGE PER TDRR		
		G	CHANGED PER TDRR 24813		
		(H) H	Revised per TDRR 25306	2-4-66	
		J	REVISED PER TDRR 25887	11 FEB 66	elP
		(M) K	REVISED PER TDRR 25888	3 MAR 66	JJJ
		M L	REVISED PER TDRR 27743	12-APR -66	B. RWH
		M	REVISED PER TDRR28361	4-MAY 66	B.

REPLACES REV E WITH CHANGE

REV	K	K	L	K	K	K	K	K	K	L	M													
SHEET	21	22	23	24	25	26	27	28	29	30	31	32												
REV STATUS	REV						M	K	K	K	M	K	K	M	K	M	K	K	K	K	K	K	K	K
OF SHEETS	SHEET						1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16	17	18	19	20

AC ELECTRONICS DIVISION
GENERAL MOTORS CORP. MILWAUKEE WIS.

MANNED
SPACECRAFT CENTER
HOUSTON, TEXAS

DRAWN R. Fahr DATE 9 DEC 65
CHECKED W. Diehl 9 DEC. 65
APPROVAL E. HETERSON 10 DEC. 65
APPROVAL 12-14-65 DEC 20 65

G & N INTERCONNECT HARNESS "H"

(C/M, BLOCK II)

NASA APPROVAL A. C. METZGER
MIT APPROVAL

CODE IDENT NO.	SIZE		REV
80230	A	2014648	M

CONTRACT NAS9-497 SCALE SHEET 1 OF 32

NOTE NUMBER	GENERAL NOTES DESCRIPTION
1	SHIELD TERMINATION FIGURES ARE PER ND1002071 FOR FIG. 6A, 6B AND ND 1002032 FOR FIGURE 7.
2	INTERPRET DRAWING IN ACCORDANCE WITH STANDARDS PRESCRIBED BY MIL-D-70327.
3	INTERCONNECT LIST FOR THIS HARNESS IS 2014678.
4	PARTIAL CIRCUIT POINTS ARE SHOWN. PREFIX WITH UNIT NUMBER 56 FOR COMPLETE CIRCUIT POINT
5	THE SUFFIX LETTER OF A CONDUCTOR IDENTIFICATION NUMBER IDENTIFIES A SHIELD LEAD, COLOR, OR MARKED LETTER. A - FROM END OF SHIELD B - TO END OF SHIELD G - GREEN K - BLACK L - BLUE N - BROWN R - RED W - WHITE Y - YELLOW
6	ASTERISK DENOTES LOWER CASE LETTER
7	GRID MODULE ON PICTURE SHEET IS 1 INCH TRUE POSITION
8	UNLESS OTHERWISE SPECIFIED FEATURE CENTERLINES ON PICTURE SHEET ARE LOCATED WITHIN + OR - .25. ENDS OF HOOKUP WIRES OR ACCESSORIES ARE LOCATED WITHIN .12.
9	VENDOR ITEM - SEE SOURCE CONTROL OR SPECIFICATION CONTROL DRAWING.
10	CRIMP CONTACTS PER ND1002032.

NOTE NUMBER	GENERAL NOTES DESCRIPTION
11	ALL UNUSED CONTACT CAVITIES SHALL BE FILLED WITH A CONTACT OR CONTACT AND SEALING PLUG AS FOLLOWS CONNECTOR 56J5 AND P25 USE ITEM NUMBERS 19 AND 24. CONNECTOR 56P27, USE ITEM NUMBER 20. CONNECTOR 56P30, AND 31 USE ITEM NUMBERS 18 AND 23.
12	LACE HARNESS PER ND1002032 USING ITEM NUMBER 40.
13	A SMALL QUANTITY OF POTTING COMPOUND MUST BE PUT BETWEEN THE THREADED PORTION OF CONNECTOR AND SILICONE RUBBER GROMMET TO SEAL AND BOND RING TO CONNECTOR PRIOR TO POTTING.
14	ALL SHIELDED TERMINATIONS SHALL BE LOCATED BELOW REFERENCE LINE A. THERE SHALL BE NO EXPOSED CONDUCTORS AT THE SURFACE OF THE POTTING COMPOUND.
15	BEFORE LACING HARNESS, APPLY 2 TURNS OF TAPE TO INDICATE CABLE CLAMP LOCATION.
16	WRAP TAPE AROUND HARNESS IN AREA SHOWN AS REQUIRED TO BUILD UP DIAMETER TO FIT SHELL HOLE.
17	MARK CONNECTOR WITH REFERENCE DESIGNATION AS SHOWN .12 HIGH, BLACK, HOT IMPRESSION STAMPING PERND1002019, CENTRALIZE.
19	MARK CHARACTERS .12 HIGH, BLACK, PER ND1002019, SERIALIZE PER ND1002023.
20	CONTINUITY TEST PER CONDUCTOR CHART. RESISTANCE SHALL BE LESS THAN 1/2 OHM. TEST PER MIL-STD-202, METHOD 303.

NOTE NUMBER	GENERAL NOTES DESCRIPTION
21	INSULATION RESISTANCE SHALL BE GREATER THAN 100 MEGOHMS WITH 500 VDC APPLIED BETWEEN A. THE ASSEMBLY PINS AND STRUCTURE GROUND, WITH THE EXCEPTION OF THOSE PINS ELECTRICALLY CONNECTED TO STRUCTURE GROUND AND THOSE PINS SPECIFIED IN PAR. B. B. EACH PIN AND ALL OTHER PINS NOT ELECTRICALLY CONNECTED, INCLUDING ALL SPARE PINS. TEST PER MIL-STD-202, METHOD 302, EXCEPT ELECTRIFICATION TIME NOT APPLICABLE. SHORT CIRCUIT CURRENT LIMITED TO 15 MILLIAMPS.
22	PRESEAL BACK OF CONNECTOR P27 PRIOR TO ENCAPSULATION PER ND1002187 TYPE III USING ITEMS 36, 37, 38, AND 39.
23	ENCAPSULATE BACK OF CONNECTORS PER ND1002236 USING ITEMS 34 AND 35.
24	CONDUCTORS LISTED WITH AN A OR B IN THE REMARKS COLUMN ARE TO BE GROUP SHIELDED PER DETAILS A, B AND C OF THE CONFIGURATION DRAWING.
25	GROUP SHIELDING - THREAD ONE CONTINUOUS LENGTH OF GROUND WIRE, ITEM 10, THROUGH CENTER OF EMI/RFI SHIELDING TAPE, ITEM 29. ALLOW 6 INCHES OF GROUND WIRE TO EXTEND BEYOND ENDS OF SHIELDING TAPE. WRAP CABLE WITH ONE CONTINUOUS LENGTH OF PREPARED SHIELDING. SUCCESSIVE TURNS SHALL OVERLAP BY APPROXIMATELY 1/2 THE WIDTH OF THE TAPE, WITH A MINIMUM OF RIDGES AND FOLDS.
26	COMPLETELY COVER SHIELD WITH ONE CONTINUOUS WRAP OF INSULATION TAPE, ITEM 32. SUCCESSIVE TURNS SHALL OVERLAP BY APPROXIMATELY 1/2 THE WIDTH OF THE TAPE, WITH A MINIMUM OF RIDGES AND FOLDS. WRAP TAPE IN OPPOSITE DIRECTION TO SHIELD WRAP.

NOTE NUMBER	GENERAL NOTES DESCRIPTION
27	ASSEMBLE INSULATION TUBING, ITEM 30, OVER GROUND WIRE AS REQUIRED TO REACH TERMINATION. ASSEMBLE SHRINK SLEEVING AS SHOWN.
28	DELETED
29	DELETED
30	ASSEMBLE A LENGTH OF WIRE BRAID, ITEM 57, OVER CONDUCTORS H135, H136, AND H137. ALLOW 1.50 INCHES OF LEAD TO EXTEND BEYOND BRAID. COVER BRAID WITH TEFLON TAPE, ITEM 32, PER NOTE 26. ALLOW .25 INCH OF BRAID TO EXTEND BEYOND TAPE. FOLD BRAID OVER TAPE AND TERMINATE PER ND1002071, FIG. 6B.
31	NUMBERS INDICATE SEQUENCE IN WHICH GROUP SHIELD A IS TO BE WRAPPED. CUT DRAIN WIRE BACK 1/2 INCH WITHIN SHIELD WRAP AT P30 AND P31 ENDS.
32	PERFORM WORKMANSHIP VIBRATION A. SINUSOIDAL SWEEP AT 3.5 G RMS. LIMITED TO 0.3 INCH PEAK TO PEAK DISPLACEMENT, FROM 10 TO 2000 CPS AT A RATE OF 4 OCTAVES PER MINUTE. B. VIBRATION ALONG THE X AXIS OF THE SPACE CRAFT. C. MONITOR FOR DISCONTINUITIES OF 10 MICRO SECONDS OR GREATER DURING VIBRATION. D. COMPLETE CONTINUITY AND INSULATION RESISTANCE TESTING MUST BE ACCOMPLISHED AFTER VIBRATION.
33	BOND NUT PLATE ASSEMBLIES TO CONNECTOR 56J5 PER ND1002004, USING ITEMS 61 AND 62.

NOTE NUMBER — GENERAL NOTES

DESCRIPTION

LEAD TOLERANCE CHART

	LEAD LG	JKT STRIP LG	SHIELD STRIP LG	LEAD CUT LG	INS STRIP LG
UNDER 3 INCHES	+ .12-.00	+.06-.06	+.06-.06	+.06-.06	+.06-.00
3 INCH TO 3 FT	+ .50-.00	+.25-.25	+.25-.25	+.25-.25	
3 FT TO 10 FT	+1.00-.00				
10 FT AND OVER	+2.00-.00				

SEE NOTE — LIST OF MATERIALS

NUMBER	ITEM	QTY	PART NO.	DESCRIPTION
	1			DELETED
	2	1	2014648-002	WIRE PER 1010789-006, 22 AWG, YEL, 240 FT TOT LG
	3	1	2014648-003	WIRE PER 1010789-016, 26 AWG, YEL, 170 FT TOT LG
	4	1	2014648-004	WIRE PER 1010789-008, 22 AWG, YEL, RED, 10 FT TOT LG
	5	1	2014648-005	WIRE PER 1010789-017, 26 AWG, YEL, RED, 8 FT TOT LG
	6			DELETED
	7	1	2014648-007	WIRE PER 1010789-019, 26 AWG, YEL, RED, GRN, BRN, 5 FT TOT LG
	8	1	2014648-008	WIRE PER 1010789-015, 26 AWG, YEL, RED, YEL JKT, 20 FT TOT LG
	9	1	2014648-009	WIRE PER 1010789-024, 26 AWG, BLK, 5 FT TOT LG
	10	1	2014648-010	WIRE PER QQ-W-343, TYPE C, CLASS C, 22 AWG, 30 FT TOT LG
	11	1	2014648-011	WIRE PER 1010789-002, 24 AWG, BLK, 5 FT TOT LG
	12	1	2014748-011	CONNECTOR, PLUG, ELECTRICAL, (56P27)
9	13	1	1010929-003	CONNECTOR, PLUG, ELECTRICAL, (56P25)
9	14	1	1010921- 1	CONNECTOR, PLUG, ELECTRICAL, (56P30)

SEE NOTE — LIST OF MATERIALS

NUMBER	ITEM	QTY	PART NO.	DESCRIPTION
9	15	1	1010921- 2	CONNECTOR, PLUG, ELECTRICAL, (56P31)
9	16	1	1010930-003	CONNECTOR, RECEPTACLE, ELECTRICAL (56J5)
9	18	36	1010932- 2	CONTACT, PIN
9	19	X	1010770- 2	CONTACT, SOCKET, SUPPLIED WITH CONNECTORS 1010929, AND 1010930.
9	20	56	1010955- 1	CONTACT, MALE
9	21	8	1010955- 2	CONTACT, MALE
	22	2	2014670- 13	ADAPTER, CONNECTOR
9	23	7	1010983- 1	PLUG, PROTECTIVE SEALING
9	24	39	1010958- 1	PLUG, PROTECTIVE SEALING
	25			DELETED
9	29	AR	1010989	TAPE, SHIELDING, EMI/RFI
9	30	AR	1006776- 19	INSULATION SLEEVING
	32	AR	MIL-T-23594	TAPE, TEFLON, TYPE II, 1 INCH WIDE
	33	AR	MIL-T-23594	TAPE, TEFLON, TYPE II, 1/4 INCH WIDE
9	34	AR	1012503	COMPOUND, POTTING, POLYURETHANE
9	35	AR	1012504	PRIMER, METAL PARTS
9	36	AR	1006277	SILICA, PULVERIZED, PYROGENIC
9	37	AR	1008822	COLORANT, EPOXY BASE

SEE NOTE — LIST OF MATERIALS

NUMBER	ITEM	QTY	PART NO.	DESCRIPTION
9	38	AR	1010661	EPOXY RESIN
9	39	AR	1010679	ADHESIVE ACTIVATOR
9	40	AR	1012507-004	TAPE, LACING AND TYING
	42			DELETED
	43			DELETED
	44			DELETED
	45			DELETED
	46			DELETED
	47			DELETED
	48			DELETED
	49			DELETED
	50	4	MS17182-1	TERMINAL LUG
	51	4	MS35333-69	WASHER, LOCK
9	52	4	1006783- 93	SCREW, BUTTON HD
9	53	13	1010402- 2	SLEEVE, SOLDER
	54			DELETED
	55			DELETED
	56			DELETED

SEE NOTE

LIST OF MATERIALS

NUMBER ITEM	QTY	PART NO.	DESCRIPTION
57	1	2014648-012	WIRE BRAID, QQ-B-575, .12 DIA, 36 AWG, 10 FT TOTAL LENGTH
58			DELETED
59	1	1012534- 36	SLEEVING, INSULATION, ELEC, (HEAT SHRINKABLE)
60	1	2010725-011	NUT PLATE ASSEMBLY
61	AR	1010682	EPOXY RESIN
62	AR	1010683	CURING AGENT, AMINE

SIZE	CODE IDENT NO.	
A	80230	2014648
SCALE-NONE	REV LTR M	SHEET 10 OF 32

MIL 2084 9-65

LEAD IDENT		WIRE MATL ITEM	LEAD LG	CIRCUIT PT FROM (A) TO (B)	TERM. AREA NO.	JKT STRIP LG	SHLD STRIP LG	LEAD CUT LG	INS STRIP LG	TIN	NOTE ONE, FIG	ACCESSORY ITEMS	REMARKS
H	1			DELETED									
H	2			DELETED									
H	3		2	P27-A6 P30-9					.18 .13	NO NO		20	
H	4		2	P27-A7 P30-9					.18 .13	NO NO		20	
H	5		2	P27-B6 P30-9					.18 .13	NO NO		20	
H	6		2	P27-B7 P30-9					.18 .13	NO NO		20 18	
H	7		2	P27-C6 P30-10					.18 .13	NO NO		20	
H	8		2	P27-C7 P30-10					.18 .13	NO NO		20	
H	9		2	P27-D6 P30-10					.18 .13	NO NO		20 18	
H	10			DELETED									
H	11			DELETED									
H	12		2	P27-A3 P31-9					.18 .13	NO NO		20	

SIZE	CODE IDENT NO.	
A	80230	2014648
SCALE-NONE	REV LTR K	SHEET 11 OF 32

MIL 2084 9-65

LEAD IDENT		WIRE MATL ITEM	LEAD LG	CIRCUIT PT FROM (A) TO (B)	TERM. AREA NO.	JKT STRIP LG	SHLD STRIP LG	LEAD CUT LG	INS STRIP LG	TIN	NOTE ONE, FIG	ACCESSORY ITEMS	REMARKS
H	13	2		P27-A4 P31-9					.18 .13	NO NO		20	
H	14	2		P27-A5 P31-9					.18 .13	NO NO		20	
H	15	2		P27-B4 P31-9					.18 .13	NO NO		20 18	
H	16	2		P27-B5 P31-10					.18 .13	NO NO		20	
H	17	2		P27-C4 P31-10					.18 .13	NO NO		20	
H	18	2		P27-C5 P31-10					.18 .13	NO NO		20 18	
H	19			DELETED									
H	20	2		P27-F7 P30-8					.18 .13	NO NO		20	
H	21	2		P27-G7 P30-8					.18 .13	NO NO		20	
H	22	2		P27-H7 P30-8					.18 .13	NO NO		20 18	
H	23			DELETED									
H	24	2		P27-F8 P31-8					.18 .13	NO NO		20	

SIZE	CODE IDENT NO.	
A	80230	2014648
SCALE-NONE	REV LTR K	SHEET 12 OF 32

MIL 2084 9-65

LEAD IDENT		WIRE MATL ITEM	LEAD LG	CIRCUIT PT FROM (A) TO (B)	TERM. AREA NO.	JKT STRIP LG	SHLD STRIP LG	LEAD CUT LG	INS STRIP LG	TIN	NOTE ONE, FIG	ACCESSORY ITEMS	REMARKS
H	25	2		P27-G8 P31-8					.18 .13	NO NO		20	
H	26	2		P27-H8 P31-8					.18 .13	NO NO		20 18	
H	27			DELETED									
H	28			DELETED									
H	29			DELETED									
H	30			DELETED									
H	31			DELETED									
H	32			DELETED									
H	33	2		P27-B8 P30-16					.18 .13	NO NO		20	
H	34	2		P27-B9 P31-16					.18 .13	NO NO		20	
H	35	2		P27-C8 P30-16					.18 .13	NO NO		20	
H	36	2		P27-C9 P31-16					.18 .13	NO NO		20	

SIZE	CODE IDENT NO.	
A	80230	2014648
SCALE-NONE	REV LTR K	SHEET 13 OF 32

MIL 2084 9-65

LEAD IDENT	WIRE MATL ITEM	LEAD LG	CIRCUIT PT FROM (A) TO (B)	TERM. AREA NO.	JKT STRIP LG	SHLD STRIP LG	LEAD CUT LG	INS STRIP LG	TIN	NOTE ONE, FIG	ACCESSORY ITEMS	REMARKS
H 37	2		P27-D7 P31-15					.18 .13	NO NO		20	
H 38	2		P27-D8 P31-15					.18 .13	NO NO		20	
H 39	2		P27-D9 P30-15					.18 .13	NO NO		20	
H 40	2		P27-F9 P30-15					.18 .13	NO NO		20	
H 41	2		P27-G9 P30-3					.18 .13	NO NO		20	
H 42	2		P27-H9 P31-3					.18 .13	NO NO		20	
H 43			DELETED									
H 44			DELETED									
H 45			DELETED									
H 46			DELETED									
H 47			DELETED									
H 47G			DELETED									

SIZE	CODE IDENT NO.	
A	80230	2014648
SCALE-NONE	REV LTR K	SHEET 14 OF 32

MIL 2084 9-65

LEAD IDENT	WIRE MATL ITEM	LEAD LG	CIRCUIT PT FROM (A) TO (B)	TERM. AREA NO.	JKT STRIP LG	SHLD STRIP LG	LEAD CUT LG	INS STRIP LG	TIN	NOTE ONE, FIG	ACCESSORY ITEMS	REMARKS
H 47R			DELETED									
H 47Y			DELETED									
H 48			DELETED									
H 48G			DELETED									
H 48R			DELETED									
H 48Y			DELETED									
H 49			DELETED									
H 49G			DELETED									
H 49R			DELETED									
H 49Y			DELETED									
H 50			DELETED									
H 50G			DELETED									

SIZE	CODE IDENT NO.	
A	80230	2014648
SCALE-NONE	REV LTR K	SHEET 15 OF 32

MIL 2084 9-65

LEAD IDENT	WIRE MATL ITEM	LEAD LG	CIRCUIT PT FROM (A) TO (B)	TERM. AREA NO.	JKT STRIP LG	SHLD STRIP LG	LEAD CUT LG	INS STRIP LG	TIN	NOTE ONE, FIG	ACCESSORY ITEMS	REMARKS
H 50R			DELETED									
H 50Y			DELETED									
H 51			DELETED									
H 52			DELETED									
H 53			DELETED									
H 54			DELETED									
H 55			DELETED									
H 55G			DELETED									
H 55R			DELETED									
H 55Y			DELETED									
H 56			DELETED									
H 56G			DELETED									

SIZE	CODE IDENT NO.	
A	80230	2014648
SCALE-NONE	REV LTR K	SHEET 16 OF 32

MIL 2084 9-65

LEAD IDENT	WIRE MATL ITEM	LEAD LG	CIRCUIT PT FROM (A) TO (B)	TERM. AREA NO.	JKT STRIP LG	SHLD STRIP LG	LEAD CUT LG	INS STRIP LG	TIN	NOTE ONE, FIG	ACCESSORY ITEMS	REMARKS
H 56R			DELETED									
H 56Y			DELETED									
H 57			DELETED									
H 57G			DELETED									
H 57R			DELETED									
H 57Y			DELETED									
H 58			DELETED									
H 58G			DELETED									
H 58R			DELETED									
H 58Y			DELETED									
H 59			DELETED									
H 59G			DELETED									

SIZE	CODE IDENT NO.	
A	80230	2014648
SCALE-NONE	REV LTR K	SHEET 17 OF 32

MIL 2084 9-65

LEAD IDENT	WIRE MATL ITEM	LEAD LG	CIRCUIT PT FROM (A) TO (B)	TERM. AREA NO.	JKT STRIP LG	SHLD STRIP LG	LEAD CUT LG	INS STRIP LG	TIN	NOTE ONE, FIG	ACCESSORY ITEMS	REMARKS
H 59R			DELETED									
H 59Y			DELETED									
H 61			DELETED									
H 62			DELETED									
H 63R			DELETED									
H 63Y			DELETED									
H 67	5											
H 67R			P25-83					.13	NO		19	
			P27-K5					.18	NO		21	
H 67Y			P25-84					.13	NO		19	
			P27-K4					.18	NO		21	
H 68	7											
H 68G			P25-55					.13	NO		19	
			P27-H4					.22	NO			
H 68N			P25-53					.13	NO		19	
			P27-H4					.22	NO		20	

SIZE	CODE IDENT NO.	
A	80230	2014648
SCALE-NONE	REV LTR K	SHEET 18 OF 32

MIL 2084 9-65

LEAD IDENT	WIRE MATL ITEM	LEAD LG	CIRCUIT PT FROM (A) TO (B)	TERM. AREA NO.	JKT STRIP LG	SHLD STRIP LG	LEAD CUT LG	INS STRIP LG	TIN	NOTE ONE, FIG	ACCESSORY ITEMS	REMARKS
H 68R			P25-31					.13	NO		19	
			P27-H5					.18	NO		21	
H 68Y			P25-54					.13	NO		19	
			P27-G5					.18	NO		21	
H 69	2		P25-57					.13	NO		19	
			P27-G4					.18	NO		20	
H 70	3		J5-62					.13	NO		19	B
			P25-51					.13	NO		19	
H 71	3		J5-63					.13	NO		19	B
			P25-78					.13	NO		19	
H 72	3		J5-38					.13	NO		19	B
			P25-77					.13	NO		19	
H 73	3		J5-40					.13	NO		19	B
			P25-76					.13	NO		19	
H 74	3		J5-39					.13	NO		19	B
			P25-79					.13	NO		19	
H 75	3		J5-64					.13	NO		19	B
			P25-49					.13	NO		19	
H 76	2		J5-66					.13	NO		19	B
			P25-30					.13	NO		19	
H 77	3		J5-65					.13	NO		19	B
			P25-75					.13	NO		19	
H 78	2		J5-41					.13	NO		19	B
			P25-28					.13	NO		19	

SIZE	CODE IDENT NO.	
A	80230	2014648
SCALE-NONE	REV LTR K	SHEET 19 OF 32

MIL 2084 9-65

LEAD IDENT	WIRE MATL ITEM	LEAD LG	CIRCUIT PT FROM (A) TO (B)	TERM. AREA NO.	JKT STRIP LG	SHLD STRIP LG	LEAD CUT LG	INS STRIP LG	TIN	NOTE ONE, FIG	ACCESSORY ITEMS	REMARKS
H 79	2		J5-42					.13	NO		19	B
			P25-48					.13	NO		19	
H 80	3		J5-52					.13	NO		19	B
			P25-2					.13	NO		19	
H 81	3		J5-76					.13	NO		19	B
			P25-9					.13	NO		19	
H 82	3		J5-30					.13	NO		19	B
			P25-22					.13	NO		19	
H 83	3		J5-29					.13	NO		19	B
			P25-41					.13	NO		19	
H 84	3		J5-14					.13	NO		19	B
			P25-66					.13	NO		19	
H 85	3		J5-50					.13	NO		19	B
			P25-3					.13	NO		19	
H 86	3		J5-74					.13	NO		19	B
			P25-10					.13	NO		19	
H 87	3		J5-75					.13	NO		19	B
			P25-23					.13	NO		19	
H 88	3		J5-51					.13	NO		19	B
			P25-42					.13	NO		19	
H 89	3		J5-77					.13	NO		19	B
			P25-67					.13	NO		19	
H 90	3		J5-27					.13	NO		19	B
			P25-12					.13	NO		19	

SIZE	CODE IDENT NO.	
A	80230	2014648
SCALE-NONE	REV LTR K	SHEET 20 OF 32

MIL 2084 9-65

LEAD IDENT	WIRE MATL ITEM	LEAD LG	CIRCUIT PT FROM (A) TO (B)	TERM. AREA NO.	JKT STRIP LG	SHLD STRIP LG	LEAD CUT LG	INS STRIP LG	TIN	NOTE ONE, FIG	ACCESSORY ITEMS	REMARKS
H 91	3		J5-13					.13	NO		19	B
			P25-11					.13	NO		19	
H 92	3		J5-28					.13	NO		19	B
			P25-24					.13	NO		19	
H 93	3		J5-73					.13	NO		19	B
			P25-43					.13	NO		19	
H 94	3		J5-49					.13	NO		19	B
			P25-68					.13	NO		19	
H 95	2		J5-45					.13	NO		19	B
			P25-7					.13	NO		19	
H 96	3		J5-72					.13	NO		19	B
			P25-27					.13	NO		19	
H 97	3		J5-48					.13	NO		19	B
			P25-45					.13	NO		19	
H 98	3		J5-47					.13	NO		19	B
			P25-26					.13	NO		19	
H 99	3		J5-71					.13	NO		19	B
			P25-25					.13	NO		19	
H 100	3		J5-4					.13	NO		19	B
			P25-47					.13	NO		19	
H 101	3		J5-22					.13	NO		19	B
			P25-70					.13	NO		19	
H 102	3		J5-46					.13	NO		19	B
			P25-46					.13	NO		19	

SIZE	CODE IDENT NO.	
A	80230	2014648
SCALE-NONE	REV LTR K	SHEET 21 OF 32

MIL 2084 9-65

LEAD IDENT	WIRE MATL ITEM	LEAD LG	CIRCUIT PT FROM (A) TO (B)	TERM. AREA NO.	JKT STRIP LG	SHLD STRIP LG	LEAD CUT LG	INS STRIP LG	TIN	NOTE ONE, FIG	ACCESSORY ITEMS	REMARKS
H 103	2		J5-70					.13	NO		19	D
			P25-73					.13	NO		19	
H 104	3		J5-25					.13	NO		19	B
			P25-13					.13	NO		19	
H 105	3		J5-26					.13	NO		19	B
			P25-72					.13	NO		19	
H 106	3		J5-11					.13	NO		19	B
			P25-74					.13	NO		19	
H 107	3		J5-23					.13	NO		19	B
			P25-44					.13	NO		19	
H 108	3		J5-12					.13	NO		19	B
			P25-71					.13	NO		19	
H 109	3		J5-10					.13	NO		19	B
			P25-69					.13	NO		19	
H 110	3		J5-24					.13	NO		19	B
			P25-18					.13	NO		19	
H 111	2		J5-44					.13	NO		19	B
			P25-21					.13	NO		19	
H 112	2		J5-68					.13	NO		19	B
			P25-8					.13	NO		19	
H 113	2		J5-43					.13	NO		19	B
			P25-1					.13	NO		19	
H 120	2		P27-G3					.18	NO		20	
			P30-6					.13	NO		18	

SIZE	CODE IDENT NO.	
A	80230	2014648
SCALE-NONE	REV LTR K	SHEET 22 OF 31

MIL 2084 9-65

LEAD IDENT	WIRE MATL ITEM	LEAD LG	CIRCUIT PT FROM (A) TO (B)	TERM. AREA NO.	JKT STRIP LG	SHLD STRIP LG	LEAD CUT LG	INS STRIP LG	TIN	NOTE ONE, FIG	ACCESSORY ITEMS	REMARKS
H 121	2		P27-G2					.18	NO		20	
			P31-6					.13	NO		18	
H 122			DELETED									
H 123			DELETED									
H 128			DELETED									
H 128G			DELETED									
H 128R			DELETED									
H 128Y			DELETED									
H 129	5											
H 129R			P25-14					.13	NO		19	
			P27-F6					.18	NO		21	
H 129Y			P25-32					.13	NO		19	
			P27-G6					.18	NO		21	
H 130			DELETED									
H 130R			DELETED									

SIZE	CODE IDENT NO.	
A	80230	2014648
SCALE-NONE	REV LTR L	SHEET 23 OF 32

MIL 2084 9-65

LEAD IDENT	WIRE MATL ITEM	LEAD LG	CIRCUIT PT FROM (A) TO (B)	TERM. AREA NO.	JKT STRIP LG	SHLD STRIP LG	LEAD CUT LG	INS STRIP LG	TIN	NOTE ONE, FIG	ACCESSORY ITEMS	REMARKS
H 130Y			DELETED									
H 131	8				1.00	.75				6B	53	
					1.75	1.50				6B	59	
H 131A	11		SHLD H131					.20	NO			
			P27-H2					.18	NO		20	
H 131B			DELETED									
H 131R			P27-K3					.18	NO		21	
			P30-17					.13	NO		18	
H 131Y			P27-H3					.18	NO		21	
			P30-18					.13	NO		18	
H 132	8				1.00	.75				6A	53	
					1.75	1.50				6B	53	
H 132A	11		SHLD H132					.20	NO			
			E16					.19	NO			
H 132B	9		P27-H6					.22	NO			
			SHLD H132					.20	NO			
H 132R			J5-19					.13	NO		19	
			P27-K6					.22	NO			
H 132Y			J5-18					.13	NO		19	
			P27-K7					.22	NO			
H 133	8				1.00	.75				6A	53	
					1.75	1.50				6B	53	

SIZE	CODE IDENT NO.	
A	80230	2014648
SCALE-NONE	REV LTR K	SHEET 24 OF 32

MIL 2084 9-65

LEAD IDENT	WIRE MATL ITEM	LEAD LG	CIRCUIT PT FROM (A) TO (B)	TERM. AREA NO.	JKT STRIP LG	SHLD STRIP LG	LEAD CUT LG	INS STRIP LG	TIN	NOTE ONE, FIG	ACCESSORY ITEMS	REMARKS
H 133A	11		SHLD H133					.20	NO			
			E17					.19	NO			
H 133B	9		P27-H6					.22	NO		20	
			SHLD H133					.20	NO			
H 133R			P25-38					.13	NO		19	
			P27-K6					.22	NO		20	
H 133Y			P25-40					.13	NO		19	
			P27-K7					.22	NO		20	
H 134	8				1.00	.75				6A	53	
					1.75	1.50				6A	53	
H 134A	11		SHLD H134					.20	NO			
			E16					.19	NO			
H 134B	11		E17					.19	NO			
			SHLD H134					.20	NO			
H 134R			J5-7					.13	NO		19	
			P25-5					.13	NO		19	
H 134Y			J5-8					.13	NO		19	
			P25-4					.13	NO		19	
H 135	4									6A	53	SEE NOTE 30
										6B	53	
H 135A	11		SHLD H135					.20	NO			
			E17					.19	NO		50	
H 135B	11		P31-11					.13	NO			
			SHLD H135					.20	NO			

SIZE	CODE IDENT NO.	
A	80230	2014648
SCALE-NONE	REV LTR K	SHEET 25 OF 32

MIL 2084 9-65

LEAD IDENT	WIRE MATL ITEM	LEAD LG	CIRCUIT PT FROM (A) TO (B)	TERM.JKT AREA NO.	STRIP LG	SHLD STRIP LG	LEAD CUT LG	INS STRIP LG	TIN	NOTE ONE, FIG	ACCESSORY ITEMS	REMARKS
H 135R			P25-62					.13	NO		19	
			P31-17					.13	NO			
H 135Y			P25-63					.13	NO		19	
			P31-18					.13	NO			
H 136	4									6A	53	SEE NOTE 30
										6B	53	
H 136A	11		SHLD H136					.20	NO			
			E18					.19	NO			
H 136B	11		P31-11					.13	NO			
			SHLD H136					.20	NO			
H 136R			P25-64					.13	NO		19	
			P31-17					.13	NO			
H 136Y			P25-65					.13	NO		19	
			P31-18					.13	NO			
H 137	4									6A	53	SEE NOTE 30
										6B	53	
H 137A	11		SHLD H137					.20	NO			
			E16					.19	NO		50	
H 137B	11		P31-11					.13	NO		18	
			SHLD H137					.20	NO			
H 137R			J5-9					.13	NO		19	
			P31-17					.13	NO		18	
H 137Y			J5-2					.13	NO		19	
			P31-18					.13	NO		18	

SIZE	CODE IDENT NO.	
A	80230	2014648
SCALE-NONE	REV LTR K	SHEET 26 OF 32

MIL 2084 9-65

LEAD IDENT	WIRE MATL ITEM	LEAD LG	CIRCUIT PT FROM (A) TO (B)	TERM.JKT AREA NO.	STRIP LG	SHLD STRIP LG	LEAD CUT LG	INS STRIP LG	TIN	NOTE ONE, FIG	ACCESSORY ITEMS	REMARKS
H 138	10		E15					.19	NO			A
			NONE									
H 139	10		E15					.19	NO		50	B
			E18					.19	NO		50	
H 141			DELETED									
H 142			DELETED									
H 143			DELETED									
H 144			DELETED									
H 145			DELETED									
H 146			DELETED									
H 147			DELETED									
H 148			DELETED									
H 149			DELETED									
H 150			DELETED									

SIZE	CODE IDENT NO.	
A	80230	2014648
SCALE-NONE	REV LTR K	SHEET 27 OF 32

MIL 2084 9-65

LEAD IDENT	WIRE MATL ITEM	LEAD LG	CIRCUIT PT FROM (A) TO (B)	TERM.JKT AREA NO.	STRIP LG	SHLD STRIP LG	LEAD CUT LG	INS STRIP LG	TIN	NOTE ONE, FIG	ACCESSORY ITEMS	REMARKS
H 151			DELETED									
H 152			DELETED									
H 153			DELETED									
H 154			DELETED									
H 157	2		P30-4					.13	NO			
			P31-4					.13	NO			
H 158	2		P30-14					.13	NO			
			P31-14					.13	NO			
H 159	2		P30-14					.13	NO			
			P31-14					.13	NO			
H 160	2		P30-15					.13	NO			
			P31-15					.13	NO			
H 161	2		P30-15					.13	NO			
			P31-15					.13	NO			
H 162	2		P30-16					.13	NO			
			P31-16					.13	NO			
H 163	2		P30-16					.13	NO		18	
			P31-16					.13	NO		18	
H 164	2		P30-3					.13	NO		18	
			P30-15					.13	NO		18	

SIZE	CODE IDENT NO.	
A	80230	2014648
SCALE-NONE	REV LTR K	SHEET 28 OF 32

MIL 2084 9-65

LEAD IDENT	WIRE MATL ITEM	LEAD LG	CIRCUIT PT FROM (A) TO (B)	TERM.JKT AREA NO.	STRIP LG	SHLD STRIP LG	LEAD CUT LG	INS STRIP LG	TIN	NOTE ONE, FIG	ACCESSORY ITEMS	REMARKS
H 165	2		P31-3					.13	NO		18	
			P31-15					.13	NO		18	
H 166	2		P30-1					.13	NO			A
			P31-1					.13	NO			
H 167	2		P30-1					.13	NO			A
			P31-1					.13	NO			
H 168	2		P27-B3					.18	NO		20	
			P30-7					.13	NO			
H 169	2		P27-B2					.18	NO		20	
			P31-7					.13	NO			
H 170	2		P27-B1					.18	NO		20	
			P30-14					.13	NO			
H 171	2		P27-C3					.18	NO		20	
			P30-7					.13	NO			
H 172	2		P27-C2					.18	NO		20	
			P31-7					.13	NO			
H 173	2		P27-C1					.18	NO		20	
			P30-14					.13	NO		18	
H 174	2		P27-D3					.18	NO		20	
			P30-7					.13	NO			
H 175	2		P27-D2					.18	NO		20	
			P31-7					.13	NO			
H 176	2		P27-D1					.18	NO		20	
			P31-14					.13	NO			

SIZE	CODE IDENT NO.	
A	80230	2014648
SCALE-NONE	REV LTR K	SHEET 29 OF 32

MIL 2084 9-65

LEAD IDENT	WIRE MATL ITEM	LEAD LG	CIRCUIT PT FROM (A) TO (B)	TERM. AREA NO.	JKT STRIP LG	SHLD STRIP LG	LEAD CUT LG	INS STRIP LG	TIN	NOTE ONE, FIG	ACCESSORY ITEMS	REMARKS
H 177	2		P27-F3					.18	NO		20	
			P30-7					.13	NO		18	
H 178	2		P27-F2					.18	NO		20	
			P31-7					.13	NO		18	
H 179	2		P27-F1					.18	NO		20	
			P31-14					.13	NO		18	
H 180	2		J5-53					.13	NO		19	A
			P30-2					.13	NO			
H 181	2		J5-78					.13	NO		19	A
			P31-2					.13	NO			
H 182	2		J5-54					.13	NO		19	A
			P30-1					.13	NO			
H 183	2		J5-79					.13	NO		19	A
			P30-2					.13	NO			
H 184	2		J5-80					.13	NO		19	A
			P31-2					.13	NO			
H 185	2		J5-55					.13	NO		19	A
			P30-1					.13	NO			
H 186	2		J5-33					.13	NO		19	A
			P30-2					.13	NO			
H 187	2		J5-32					.13	NO		19	A
			P31-2					.13	NO			
H 188	2		J5-16					.13	NO		19	A
			P30-1					.13	NO		18	

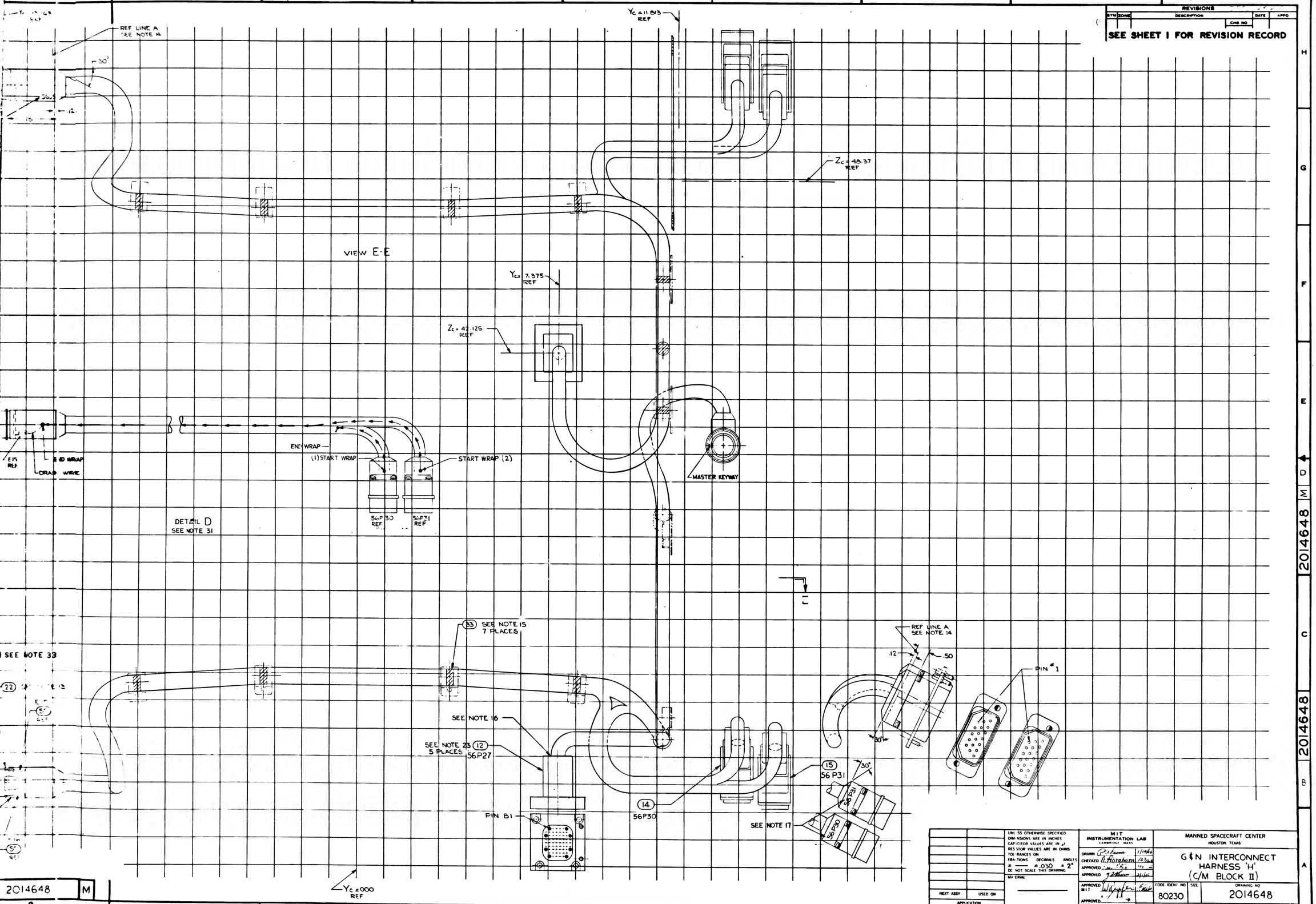
SIZE	CODE IDENT NO.	
A	80230	2014648
SCALE-NONE	REV LTR K	SHEET 30 OF 32

MIL 2084 9-65

LEAD IDENT	WIRE MATL ITEM	LEAD LG	CIRCUIT PT FROM (A) TO (B)	TERM. AREA NO.	JKT STRIP LG	SHLD STRIP LG	LEAD CUT LG	INS STRIP LG	TIN	NOTE ONE, FIG	ACCESSORY ITEMS	REMARKS
H 189	2		J5-81					.13	NO		19	A
			P30-2					.13	NO			
H 190	2		J5-57					.13	NO		19	A
			P31-2					.13	NO			
H 191	2		J5-56					.13	NO		19	A
			P31-1					.13	NO			
H 192	2		J5-58					.13	NO		19	A
			P30-2					.13	NO			
H 193	2		J5-34					.13	NO		19	A
			P31-2					.13	NO			
H 194	2		J5-35					.13	NO		19	A
			P31-1					.13	NO			
H 196	2		J5-60					.13	NO		19	
			P30-4					.13	NO		18	
H 197	2		J5-84					.13	NO		19	
			P31-4					.13	NO		18	
H 198	2		J5-31					.13	NO		19	A
			P30-2					.13	NO		18	
H 199	2		J5-15					.13	NO		19	A
			P31-2					.13	NO		18	
H 200	2		J5-5					.13	NO		19	A
			P31-1					.13	NO		18	
H 201	3		P25-15					.13	NO		19	
			P27-F5					.22	NO		20	

SIZE	CODE IDENT NO.	
A	80230	2014648
SCALE-NONE	REV LTR L	SHEET 31 OF 32

MIL 2084 9-65



REVISIONS					
SYM	ZONE	DESCRIPTION	CHG NO	DATE	APPD

SEE SHEET 1 FOR REVISION RECORD

UNLESS OTHERWISE SPECIFIED DIMENSIONS ARE IN INCHES
CAPACITOR VALUES ARE IN μf
RESISTOR VALUES ARE IN OHMS
TOLERANCES ON
FRACTIONS ± ——— DECIMALS ± .030 ANGLES ± 2°
DO NOT SCALE THIS DRAWING
MATERIAL

NEXT ASSY | USED ON
APPLICATION

MIT INSTRUMENTATION LAB
CAMBRIDGE MASS.

DRAWN G. Lyons 1/14/66
CHECKED D. Abraham 1/21/66
APPROVED [illegible] 1/21/66
APPROVED [illegible] 2/1/66
APPROVED MIT [illegible]
APPROVED MSC
DATE

MANNED SPACECRAFT CENTER
HOUSTON, TEXAS

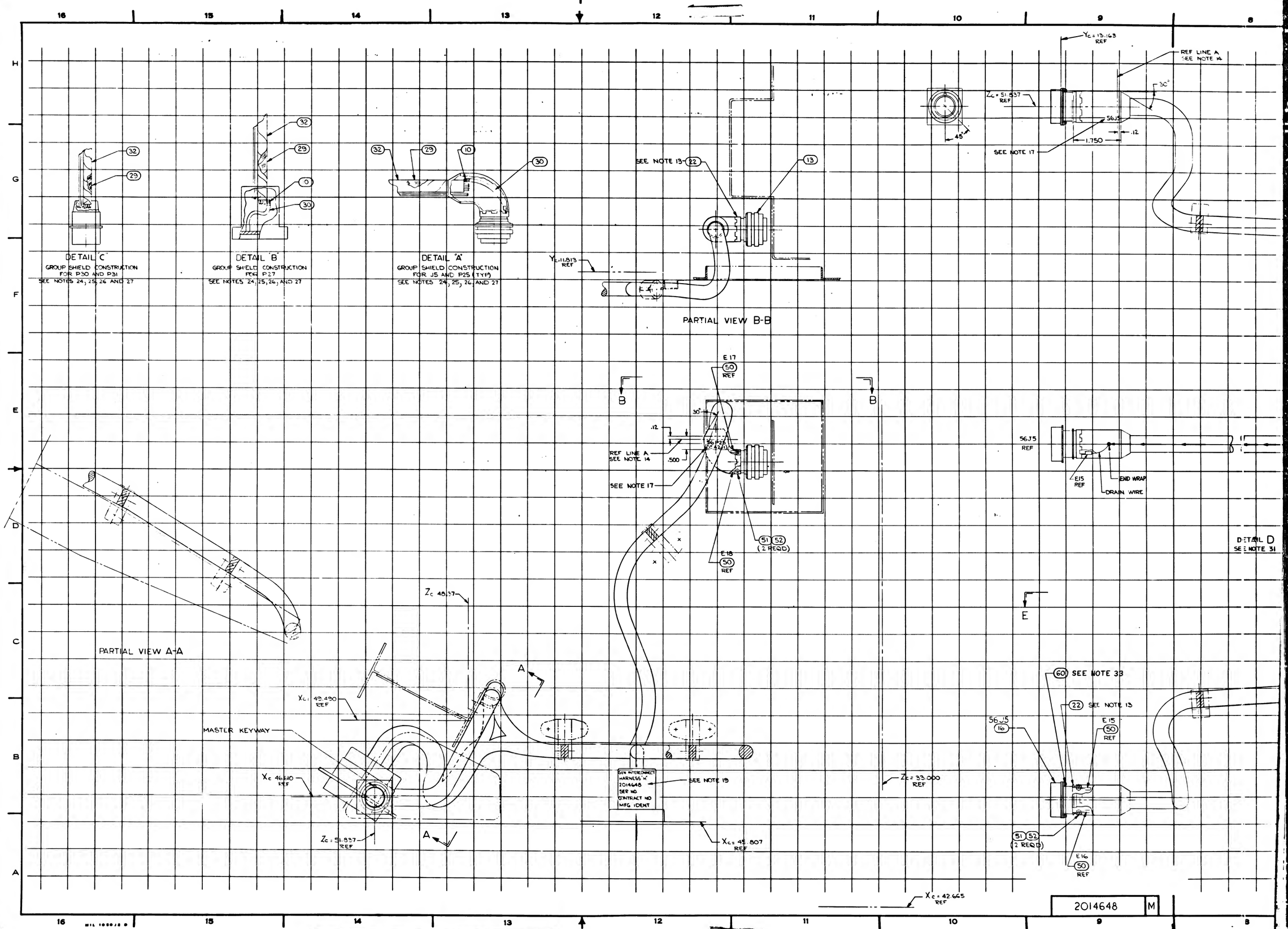
G&N INTERCONNECT HARNESS 'H' (C/M BLOCK II)

CODE IDENT NO 80230 | SIZE | DRAWING NO 2014648
SCALE FULL | SHEET 3 OF 33

2014648 M

2014648 C 2014648 M

2/2014648


DETAIL C
GROUP SHIELD CONSTRUCTION FOR P30 AND P31
SEE NOTES 24, 25, 26 AND 27
DETAIL B
GROUP SHIELD CONSTRUCTION FOR P27
SEE NOTES 24, 25, 26, AND 27
DETAIL A
GROUP SHIELD CONSTRUCTION FOR J5 AND P25 (TYP)
SEE NOTES 24, 25, 26, AND 27
PARTIAL VIEW B-B
PARTIAL VIEW A-A
DETAIL D
SEE NOTE 31
SEE NOTE 13
SEE NOTE 17
REF LINE A SEE NOTE 14
SEE NOTE 19
SEE NOTE 33
MASTER KEYWAY
END WRAP
DRAIN WIRE
GEN INTERCONNECT HARNESS 'H' 2014648 SER NO CONTRACT NO MFG IDENT
2014648
M

1/-2014648

APPLICATION		REVISIONS			
NEXT ASSY	USED ON	SYM	DESCRIPTION	DATE	APPROVAL
		F	REPLACES REV(E) WITH CHANGE PER TDRR		
		G	CHANGED PER TDRR 24813		
		H	Revised per TDRR 25306	2-4-66	
		J	REVISED PER TDRR 25887	11 FEB 66	
		K	REVISED PER TDRR 25888	3 MAR 66	JJJ
		L	REVISED PER TDRR 27743	12-APR -66	B. RWH
		M	REVISED PER TDRR28361	4-MAY 66	B.
		N	REVISED PER TDRR 28849	23 MAY 66	PHG

REPLACES REV E WITH CHANGE

REV	K	K	L	K	K	K	K	K	K	L	N													
SHEET	21	22	23	24	25	26	27	28	29	30	31	32												
REV STATUS	REV						N	K	N	K	N	N	N	M	K	M	K	K	K	K	K	K	K	K
OF SHEETS	SHEET						1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16	17	18	19	20

AC ELECTRONICS DIVISION
GENERAL MOTORS CORP. MILWAUKEE WIS.

MANNED
SPACECRAFT CENTER
HOUSTON, TEXAS

DRAWN 9 DEC 65
CHECKED 9 DEC. 65
APPROVAL E. PETERSON 10 DEC. 65
APPROVAL 10 DEC 65

G & N INTERCONNECT HARNESS "H"

(C/M, BLOCK II)

NASA APPROVAL A. C. METZGER
MIT APPROVAL

CODE IDENT NO.	SIZE		REV
80230	A	2014648	N

CONTRACT NAS9-497 | SCALE | SHEET 1 OF 32

NOTE NUMBER	GENERAL NOTES DESCRIPTION
1	SHIELD TERMINATION FIGURES ARE PER ND1002071 FOR FIG. 6A, 6B AND ND 1002032 FOR FIGURE 7.
2	INTERPRET DRAWING IN ACCORDANCE WITH STANDARDS PRESCRIBED BY MIL-D-70327.
3	INTERCONNECT LIST FOR THIS HARNESS IS 2014678.
4	PARTIAL CIRCUIT POINTS ARE SHOWN. PREFIX WITH UNIT NUMBER 56 FOR COMPLETE CIRCUIT POINT
5	THE SUFFIX LETTER OF A CONDUCTOR IDENTIFICATION NUMBER IDENTIFIES A SHIELD LEAD, COLOR, OR MARKED LETTER. A - FROM END OF SHIELD B - TO END OF SHIELD G - GREEN K - BLACK L - BLUE N - BROWN R - RED W - WHITE Y - YELLOW
6	ASTERISK DENOTES LOWER CASE LETTER
7	GRID MODULE ON PICTURE SHEET IS 1 INCH TRUE POSITION
8	UNLESS OTHERWISE SPECIFIED FEATURE CENTERLINES ON PICTURE SHEET ARE LOCATED WITHIN + OR - .25. ENDS OF HOOKUP WIRES OR ACCESSORIES ARE LOCATED WITHIN .12.
9	VENDOR ITEM - SEE SOURCE CONTROL OR SPECIFICATION CONTROL DRAWING.
10	CRIMP CONTACTS PER ND1002032.

NOTE NUMBER	GENERAL NOTES DESCRIPTION
11	ALL UNUSED CONTACT CAVITIES SHALL BE FILLED WITH A CONTACT OR CONTACT AND SEALING PLUG AS FOLLOWS CONNECTOR 56J5 AND P25 USE ITEM NUMBERS 19 AND 24. CONNECTOR 56P27, USE ITEM NUMBER 20. CONNECTOR 56P30, AND 31 USE ITEM NUMBERS 18 AND 23.
12	LACE HARNESS PER ND1002032 USING ITEM NUMBER 40.
13	APPLY BONDING MATERIAL PER ND1002187, TYPE 1, USING ITEMS 38 AND 39 TO THE THREADED PORTION OF CONNECTOR AND TO THE THREADED PORTION OF ADAPTER PRIOR TO ASSY.
14	ALL SHIELDED TERMINATIONS SHALL BE LOCATED BELOW REFERENCE LINE A. THERE SHALL BE NO EXPOSED CONDUCTORS OR ACCESSORIES AT THE SURFACE OF THE POTTING COMPOUND.
15	BEFORE LACING HARNESS, APPLY 2 TURNS OF TAPE TO INDICATE CABLE CLAMP LOCATION.
16	WRAP TAPE AROUND HARNESS IN AREA SHOWN AS REQUIRED TO BUILD UP DIAMETER TO FIT SHELL HOLE.
17	MARK CONNECTOR WITH REFERENCE DESIGNATION AS SHOWN .12 HIGH, BLACK, PER ND1002019, CENTRALIZE
19	MARK CHARACTERS .12 HIGH, BLACK, PER ND1002019, SERIALIZE PER ND1002023.
20	CONTINUITY TEST PER CONDUCTOR CHART. RESISTANCE SHALL BE LESS THAN 1/2 OHM. TEST PER MIL-STD-202, METHOD 303.

NOTE NUMBER	GENERAL NOTES DESCRIPTION
21	INSULATION RESISTANCE SHALL BE GREATER THAN 100 MEGOHMS WITH 500 VDC APPLIED BETWEEN A. THE ASSEMBLY PINS AND STRUCTURE GROUND, WITH THE EXCEPTION OF THOSE PINS ELECTRICALLY CONNECTED TO STRUCTURE GROUND AND THOSE PINS SPECIFIED IN PAR. B. B. EACH PIN AND ALL OTHER PINS NOT ELECTRICALLY CONNECTED, INCLUDING ALL SPARE PINS. TEST PER MIL-STD-202, METHOD 302, EXCEPT ELECTRIFICATION TIME NOT APPLICABLE. SHORT CIRCUIT CURRENT LIMITED TO 15 MILLIAMPS.
22	PRESEAL BACK OF CONNECTOR P27 PRIOR TO ENCAPSULATION PER ND1002187 TYPE III USING ITEMS 36, 37, 38, AND 39.
23	ENCAPSULATE BACK OF CONNECTORS PER ND1002236 USING ITEMS 34 AND 35.
24	CONDUCTORS LISTED WITH AN A OR B IN THE REMARKS COLUMN ARE TO BE GROUP SHIELDED PER DETAILS A, B AND C OF THE CONFIGURATION DRAWING.
25	GROUP SHIELDING - THREAD ONE CONTINUOUS LENGTH OF GROUND WIRE, ITEM 10, THROUGH CENTER OF EMI/RFI SHIELDING TAPE, ITEM 29. ALLOW 6 INCHES OF GROUND WIRE TO EXTEND BEYOND ENDS OF SHIELDING TAPE. WRAP CABLE WITH ONE CONTINUOUS LENGTH OF PREPARED SHIELDING. SUCCESSIVE TURNS SHALL OVERLAP BY APPROXIMATELY 1/2 THE WIDTH OF THE TAPE, WITH A MINIMUM OF RIDGES AND FOLDS.
26	COMPLETELY COVER SHIELD WITH ONE CONTINUOUS WRAP OF INSULATION TAPE, ITEM 32. SUCCESSIVE TURNS SHALL OVERLAP BY APPROXIMATELY 1/2 THE WIDTH OF THE TAPE, WITH A MINIMUM OF RIDGES AND FOLDS. WRAP TAPE IN OPPOSITE DIRECTION TO SHIELD WRAP.

NOTE NUMBER	GENERAL NOTES DESCRIPTION
27	ASSEMBLE INSULATION TUBING, ITEM 30, OVER GROUND WIRE AS REQUIRED TO REACH TERMINATION. ASSEMBLE SHRINK SLEEVING AS SHOWN.
28	DELETED
29	DELETED
30	ASSEMBLE A LENGTH OF WIRE BRAID, ITEM 57, OVER CONDUCTORS H135, H136, AND H137. ALLOW 1.50 INCHES OF LEAD TO EXTEND BEYOND BRAID. COVER BRAID WITH TEFLON TAPE, ITEM 32, PER NOTE 26. ALLOW .25 INCH OF BRAID TO EXTEND BEYOND TAPE. FOLD BRAID OVER TAPE AND TERMINATE PER ND1002071, FIG. 6B.
31	NUMBERS INDICATE SEQUENCE IN WHICH GROUP SHIELD A IS TO BE WRAPPED. CUT DRAIN WIRE BACK 1/2 INCH WITHIN SHIELD WRAP AT P30 AND P31 ENDS.
32	PERFORM WORKMANSHIP VIBRATION A. SINUSOIDAL SWEEP AT 3.5 G RMS. LIMITED TO 0.3 INCH PEAK TO PEAK DISPLACEMENT, FROM 10 TO 2000 CPS AT A RATE OF 4 OCTAVES PER MINUTE. B. VIBRATION ALONG THE X AXIS OF THE SPACE CRAFT. C. MONITOR FOR DISCONTINUITIES OF 10 MICRO SECONDS OR GREATER DURING VIBRATION. D. COMPLETE CONTINUITY AND INSULATION RESISTANCE TESTING MUST BE ACCOMPLISHED AFTER VIBRATION.
33	BOND NUT PLATE ASSEMBLIES TO CONNECTOR 56J5 PER ND1002004, USING ITEMS 61 AND 62.

NOTE NUMBER	GENERAL NOTES DESCRIPTION
34	TO CRIMP LEADS TO CONTACTS OF CONNECTORS P30 AND P31, USE SHORT LENGTHS OF 22AWG WIRE TO BUILD UP LEAD DIAMETER TO FIT CONTACT BARREL. TOTAL NUMBER OF FUNCTIONAL AND DUMMY LEADS MUST EQUAL SIX PER CONTACT. TWIST LEADS TOGETHER BEFORE CRIMPING TO CONTACT. AFTER CRIMPING, CUT DUMMY LEADS FLUSH WITH TOP OF CONTACT.

LEAD TOLERANCE CHART

	LEAD LG	JKT STRIP LG	SHIELD STRIP LG	LEAD CUT LG	INS STRIP LG
UNDER 3 INCHES	+ .12-.00	+.06-.06	+.06-.06	+.06-.06	+.06-.00
3 INCH TO 3 FT	+ .50-.00	+.25-.25	+.25-.25	+.25-.25	
3 FT TO 10 FT	+1.00-.00				
10 FT AND OVER	+2.00-.00				

SIZE	CODE IDENT NO.	
A	80230	2014648
SCALE-NONE	REV LTR N	SHEET 6 OF 32

MIL 2084 9-65

SEE NOTE — LIST OF MATERIALS

NUMBER	ITEM	QTY	PART NO.	DESCRIPTION
	1			DELETED
	2	1	2014648-002	WIRE PER 1010789-006, 22 AWG, YEL, 240 FT TOT LG
	3	1	2014648-003	WIRE PER 1010789-016, 26 AWG, YEL, 170 FT TOT LG
	4	1	2014648-004	WIRE PER 1010789-008, 22 AWG, YEL, RED, 10 FT TOT LG
	5	1	2014648-005	WIRE PER 1010789-017, 26 AWG, YEL, RED, 8 FT TOT LG
	6			DELETED
	7	1	2014648-007	WIRE PER 1010789-019, 26 AWG, YEL, RED, GRN, BRN, 5 FT TOT LG
	8	1	2014648-008	WIRE PER 1010789-015, 26 AWG, YEL, RED, YEL JKT, 20 FT TOT LG
	9	1	2014648-009	WIRE PER 1010789-024, 26 AWG, BLK, 5 FT TOT LG
	10	1	2014648-010	WIRE PER QQ-W-343, TYPE C, CLASS C, UNCOATED SILVER PLATED, 22AWG 30 FT TOT LG.
	11	1	2014648-011	WIRE PER 1010789-002, 24 AWG, BLK, 5 FT TOT LG
	12	1	2014748-011	CONNECTOR, PLUG, ELECTRICAL, (56P27)
9	13	1	1010929-003	CONNECTOR, PLUG, ELECTRICAL, (56P25)
9	14	1	1010921- 1	CONNECTOR, PLUG, ELECTRICAL, (56P30)

SIZE	CODE IDENT NO.	
A	80230	2014648
SCALE-NONE	REV LTR N	SHEET 7 OF 32

MIL 2084 9-65

SEE NOTE — LIST OF MATERIALS

NUMBER	ITEM	QTY	PART NO.	DESCRIPTION
9	15	1	1010921- 2	CONNECTOR, PLUG, ELECTRICAL, (56P31)
9	16	1	1010930-003	CONNECTOR, RECEPTACLE, ELECTRICAL (56J5)
9	18	36	1010932- 2	CONTACT, PIN
9	19	X	1010770- 2	CONTACT, SOCKET, SUPPLIED WITH CONNECTORS 1010929, AND 1010930.
9	20	56	1010955- 1	CONTACT, MALE
9	21	8	1010955- 2	CONTACT, MALE
	22	2	2014670- 13	ADAPTER, CONNECTOR
9	23	7	1010983- 1	PLUG, PROTECTIVE SEALING
9	24	39	1010958- 1	PLUG, PROTECTIVE SEALING
	25			DELETED
9	29	AR	1010989	TAPE, SHIELDING, EMI/RFI
9	30	AR	1006776- 19	INSULATION SLEEVING
	32	AR	MIL-T-23594	TAPE, TEFLON, TYPE II, 1 INCH WIDE
	33	AR	MIL-T-23594	TAPE, TEFLON, TYPE II, 1/4 INCH WIDE
9	34	AR	1012503	COMPOUND, POTTING, POLYURETHANE
9	35	AR	1012504	PRIMER, METAL PARTS
9	36	AR	1006277	SILICA, PULVERIZED, PYROGENIC
9	37	AR	1008822	COLORANT, EPOXY BASE

SIZE	CODE IDENT NO.	
A	80230	2014648
SCALE-NONE	REV LTR M	SHEET 8 OF 32

MIL 2084 9-65

SEE NOTE — LIST OF MATERIALS

NUMBER	ITEM	QTY	PART NO.	DESCRIPTION
9	38	AR	1010661	EPOXY RESIN
9	39	AR	1010679	ADHESIVE ACTIVATOR
9	40	AR	1012507-004	TAPE, LACING AND TYING
	42			DELETED
	43			DELETED
	44			DELETED
	45			DELETED
	46			DELETED
	47			DELETED
	48			DELETED
	49			DELETED
	50	4	MS17182-1	TERMINAL LUG
	51	4	MS35333-69	WASHER, LOCK
9	52	4	1006783- 93	SCREW, BUTTON HD
9	53	13	1010402- 2	SLEEVE, SOLDER
	54			DELETED
	55			DELETED
	56			DELETED

SIZE	CODE IDENT NO.	
A	80230	2014648
SCALE-NONE	REV LTR K	SHEET 9 OF 32

MIL 2084 9-65

SEE NOTE

LIST OF MATERIALS

NUMBER ITEM	QTY	PART NO.	DESCRIPTION
57	1	2014648-012	WIRE BRAID, QQ-B-575, .12 DIA, 36 AWG, 10 FT TOTAL LENGTH
58			DELETED
59	1	1012534- 36	SLEEVING, INSULATION, ELFC, (HEAT SHRINKABLE)
60	1	2010725-011	NUT PLATE ASSEMBLY
61	AR	1010682	EPOXY RESIN
62	AR	1010683	CURING AGENT, AMINE

LEAD IDENT	WIRE MATL ITEM	LEAD LG	CIRCUIT PT FROM (A) TO (B)	TERM.JKT AREA NO.	STRIP LG	SHLD STRIP LG	LEAD CUT LG	INS STRIP LG	TIN	NOTE ONE, FIG	ACCESSORY ITEMS	REMARKS
H 1			DELETED									
H 2			DELETED									
H 3	2		P27-A6 P30-9					.18 .13	NO NO		20	
H 4	2		P27-A7 P30-9					.18 .13	NO NO		20	
H 5	2		P27-B6 P30-9					.18 .13	NO NO		20	
H 6	2		P27-B7 P30-9					.18 .13	NO NO		20 18	
H 7	2		P27-C6 P30-10					.18 .13	NO NO		20	
H 8	2		P27-C7 P30-10					.18 .13	NO NO		20	
H 9	2		P27-D6 P30-10					.18 .13	NO NO		20 18	
H 10			DELETED									
H 11			DELETED									
H 12	2		P27-A3 P31-9					.18 .13	NO NO		20	

LEAD IDENT	WIRE MATL ITEM	LEAD LG	CIRCUIT PT FROM (A) TO (B)	TERM.JKT AREA NO.	STRIP LG	SHLD STRIP LG	LEAD CUT LG	INS STRIP LG	TIN	NOTE ONE, FIG	ACCESSORY ITEMS	REMARKS
H 13	2		P27-A4 P31-9					.18 .13	NO NO		20	
H 14	2		P27-A5 P31-9					.18 .13	NO NO		20	
H 15	2		P27-B4 P31-9					.18 .13	NO NO		20 18	
H 16	2		P27-B5 P31-10					.18 .13	NO NO		20	
H 17	2		P27-C4 P31-10					.18 .13	NO NO		20	
H 18	2		P27-C5 P31-10					.18 .13	NO NO		20 18	
H 19			DELETED									
H 20	2		P27-F7 P30-8					.18 .13	NO NO		20	
H 21	2		P27-G7 P30-8					.18 .13	NO NO		20	
H 22	2		P27-H7 P30-8					.18 .13	NO NO		20 18	
H 23			DELETED									
H 24	2		P27-F8 P31-8					.18 .13	NO NO		20	

LEAD IDENT	WIRE MATL ITEM	LEAD LG	CIRCUIT PT FROM (A) TO (B)	TERM.JKT AREA NO.	STRIP LG	SHLD STRIP LG	LEAD CUT LG	INS STRIP LG	TIN	NOTE ONE, FIG	ACCESSORY ITEMS	REMARKS
H 25	2		P27-G8 P31-8					.18 .13	NO NO		20	
H 26	2		P27-H8 P31-8					.18 .13	NO NO		20 18	
H 27			DELETED									
H 28			DELETED									
H 29			DELETED									
H 30			DELETED									
H 31			DELETED									
H 32			DELETED									
H 33	2		P27-B8 P30-16					.18 .13	NO NO		20	
H 34	2		P27-B9 P31-16					.18 .13	NO NO		20	
H 35	2		P27-C8 P30-16					.18 .13	NO NO		20	
H 36	2		P27-C9 P31-16					.18 .13	NO NO		20	

LEAD IDENT	WIRE MATL ITEM	LEAD LG	CIRCUIT PT FROM (A) TO (B)	TERM. AREA NO.	JKT STRIP LG	SHLD STRIP LG	LEAD CUT LG	INS STRIP LG	TIN	NOTE ONE, FIG	ACCESSORY ITEMS	REMARKS
H 37	2		P27-D7					.18	NO		20	
			P31-15					.13	NO			
H 38	2		P27-D8					.18	NO		20	
			P31-15					.13	NO			
H 39	2		P27-D9					.18	NO		20	
			P30-15					.13	NO			
H 40	2		P27-F9					.18	NO		20	
			P30-15					.13	NO			
H 41	2		P27-G9					.18	NO		20	
			P30-3					.13	NO			
H 42	2		P27-H9					.18	NO		20	
			P31-3					.13	NO			
H 43			DELETED									
H 44			DELETED									
H 45			DELETED									
H 46			DELETED									
H 47			DELETED									
H 47G			DELETED									

SIZE	CODE IDENT NO.	
A	80230	2014648
SCALE-NONE	REV LTR K	SHEET 14 OF 32

MIL 2084 9-65

LEAD IDENT	WIRE MATL ITEM	LEAD LG	CIRCUIT PT FROM (A) TO (B)	TERM. AREA NO.	JKT STRIP LG	SHLD STRIP LG	LEAD CUT LG	INS STRIP LG	TIN	NOTE ONE, FIG	ACCESSORY ITEMS	REMARKS
H 47R			DELETED									
H 47Y			DELETED									
H 48			DELETED									
H 48G			DELETED									
H 48R			DELETED									
H 48Y			DELETED									
H 49			DELETED									
H 49G			DELETED									
H 49R			DELETED									
H 49Y			DELETED									
H 50			DELETED									
H 50G			DELETED									

SIZE	CODE IDENT NO.	
A	80230	2014648
SCALE-NONE	REV LTR K	SHEET 15 OF 32

MIL 2084 9-65

LEAD IDENT	WIRE MATL ITEM	LEAD LG	CIRCUIT PT FROM (A) TO (B)	TERM. AREA NO.	JKT STRIP LG	SHLD STRIP LG	LEAD CUT LG	INS STRIP LG	TIN	NOTE ONE, FIG	ACCESSORY ITEMS	REMARKS
H 50R			DELETED									
H 50Y			DELETED									
H 51			DELETED									
H 52			DELETED									
H 53			DELETED									
H 54			DELETED									
H 55			DELETED									
H 55G			DELETED									
H 55R			DELETED									
H 55Y			DELETED									
H 56			DELETED									
H 56G			DELETED									

SIZE	CODE IDENT NO.	
A	80230	2014648
SCALE-NONE	REV LTR K	SHEET 16 OF 32

MIL 2084 9-65

LEAD IDENT	WIRE MATL ITEM	LEAD LG	CIRCUIT PT FROM (A) TO (B)	TERM. AREA NO.	JKT STRIP LG	SHLD STRIP LG	LEAD CUT LG	INS STRIP LG	TIN	NOTE ONE, FIG	ACCESSORY ITEMS	REMARKS
H 56R			DELETED									
H 56Y			DELETED									
H 57			DELETED									
H 57G			DELETED									
H 57R			DELETED									
H 57Y			DELETED									
H 58			DELETED									
H 58G			DELETED									
H 58R			DELETED									
H 58Y			DELETED									
H 59			DELETED									
H 59G			DELETED									

SIZE	CODE IDENT NO.	
A	80230	2014648
SCALE-NONE	REV LTR K	SHEET 17 OF 32

MIL 2084 9-65

LEAD IDENT	WIRE MATL ITEM	LEAD LG	CIRCUIT PT FROM (A) TO (B)	TERM. AREA NO.	JKT STRIP LG	SHLD STRIP LG	LEAD CUT LG	INS STRIP LG	TIN	NOTE ONE, FIG	ACCESSORY ITEMS	REMARKS
H 59R			DELETED									
H 59Y			DELETED									
H 61			DELETED									
H 62			DELETED									
H 63R			DELETED									
H 63Y			DELETED									
H 67		5										
H 67R			P25-83					.13	NO		19	
			P27-K5					.18	NO		21	
H 67Y			P25-84					.13	NO		19	
			P27-K4					.18	NO		21	
H 68		7										
H 68G			P25-55					.13	NO		19	
			P27-H4					.22	NO			
H 68N			P25-53					.13	NO		19	
			P27-H4					.22	NO		20	

SIZE	CODE IDENT NO.	
A	80230	2014648
SCALE-NONE	REV LTR K	SHEET 18 OF 32

MIL 2084 9-65

LEAD IDENT	WIRE MATL ITEM	LEAD LG	CIRCUIT PT FROM (A) TO (B)	TERM. AREA NO.	JKT STRIP LG	SHLD STRIP LG	LEAD CUT LG	INS STRIP LG	TIN	NOTE ONE, FIG	ACCESSORY ITEMS	REMARKS
H 68R			P25-31					.13	NO		19	
			P27-H5					.18	NO		21	
H 68Y			P25-54					.13	NO		19	
			P27-G5					.18	NO		21	
H 69		2	P25-57					.13	NO		19	
			P27-G4					.18	NO		20	
H 70		3	J5-62					.13	NO		19	B
			P25-51					.13	NO		19	
H 71		3	J5-63					.13	NO		19	B
			P25-78					.13	NO		19	
H 72		3	J5-38					.13	NO		19	B
			P25-77					.13	NO		19	
H 73		3	J5-40					.13	NO		19	B
			P25-76					.13	NO		19	
H 74		3	J5-39					.13	NO		19	B
			P25-79					.13	NO		19	
H 75		3	J5-64					.13	NO		19	B
			P25-49					.13	NO		19	
H 76		2	J5-66					.13	NO		19	B
			P25-30					.13	NO		19	
H 77		3	J5-65					.13	NO		19	B
			P25-75					.13	NO		19	
H 78		2	J5-41					.13	NO		19	B
			P25-28					.13	NO		19	

SIZE	CODE IDENT NO.	
A	80230	2014648
SCALE-NONE	REV LTR K	SHEET 19 OF 32

MIL 2084 9-65

LEAD IDENT	WIRE MATL ITEM	LEAD LG	CIRCUIT PT FROM (A) TO (B)	TERM. AREA NO.	JKT STRIP LG	SHLD STRIP LG	LEAD CUT LG	INS STRIP LG	TIN	NOTE ONE, FIG	ACCESSORY ITEMS	REMARKS
H 79		2	J5-42					.13	NO		19	B
			P25-48					.13	NO		19	
H 80		3	J5-52					.13	NO		19	B
			P25-2					.13	NO		19	
H 81		3	J5-76					.13	NO		19	B
			P25-9					.13	NO		19	
H 82		3	J5-30					.13	NO		19	B
			P25-22					.13	NO		19	
H 83		3	J5-29					.13	NO		19	B
			P25-41					.13	NO		19	
H 84		3	J5-14					.13	NO		19	B
			P25-66					.13	NO		19	
H 85		3	J5-50					.13	NO		19	B
			P25-3					.13	NO		19	
H 86		3	J5-74					.13	NO		19	B
			P25-10					.13	NO		19	
H 87		3	J5-75					.13	NO		19	B
			P25-23					.13	NO		19	
H 88		3	J5-51					.13	NO		19	B
			P25-42					.13	NO		19	
H 89		3	J5-77					.13	NO		19	B
			P25-67					.13	NO		19	
H 90		3	J5-27					.13	NO		19	B
			P25-12					.13	NO		19	

SIZE	CODE IDENT NO.	
A	80230	2014648
SCALE-NONE	REV LTR K	SHEET 20 OF 32

MIL 2084 9-65

LEAD IDENT	WIRE MATL ITEM	LEAD LG	CIRCUIT PT FROM (A) TO (B)	TERM. AREA NO.	JKT STRIP LG	SHLD STRIP LG	LEAD CUT LG	INS STRIP LG	TIN	NOTE ONE, FIG	ACCESSORY ITEMS	REMARKS
H 91		3	J5-13					.13	NO		19	B
			P25-11					.13	NO		19	
H 92		3	J5-28					.13	NO		19	B
			P25-24					.13	NO		19	
H 93		3	J5-73					.13	NO		19	B
			P25-43					.13	NO		19	
H 94		3	J5-49					.13	NO		19	B
			P25-68					.13	NO		19	
H 95		2	J5-45					.13	NO		19	B
			P25-7					.13	NO		19	
H 96		3	J5-72					.13	NO		19	B
			P25-27					.13	NO		19	
H 97		3	J5-48					.13	NO		19	B
			P25-45					.13	NO		19	
H 98		3	J5-47					.13	NO		19	B
			P25-26					.13	NO		19	
H 99		3	J5-71					.13	NO		19	B
			P25-25					.13	NO		19	
H 100		3	J5-4					.13	NO		19	B
			P25-47					.13	NO		19	
H 101		3	J5-22					.13	NO		19	B
			P25-70					.13	NO		19	
H 102		3	J5-46					.13	NO		19	B
			P25-46					.13	NO		19	

SIZE	CODE IDENT NO.	
A	80230	2014648
SCALE-NONE	REV LTR K	SHEET 21 OF 32

MIL 2084 9-65

LEAD IDENT	WIRE MATL ITEM	LEAD LG	CIRCUIT PT FROM (A) TO (B)	TERM. AREA NO.	JKT STRIP LG	SHLD STRIP LG	LEAD CUT LG	INS STRIP LG	TIN	NOTE ONE, FIG	ACCESSORY ITEMS	REMARKS
H 103	2		J5-70					.13	NO		19	D
			P25-73					.13	NO		19	
H 104	3		J5-25					.13	NO		19	B
			P25-13					.13	NO		19	
H 105	3		J5-26					.13	NO		19	B
			P25-72					.13	NO		19	
H 106	3		J5-11					.13	NO		19	B
			P25-74					.13	NO		19	
H 107	3		J5-23					.13	NO		19	B
			P25-44					.13	NO		19	
H 108	3		J5-12					.13	NO		19	B
			P25-71					.13	NO		19	
H 109	3		J5-10					.13	NO		19	B
			P25-69					.13	NO		19	
H 110	3		J5-24					.13	NO		19	B
			P25-18					.13	NO		19	
H 111	2		J5-44					.13	NO		19	B
			P25-21					.13	NO		19	
H 112	2		J5-68					.13	NO		19	B
			P25-8					.13	NO		19	
H 113	2		J5-43					.13	NO		19	B
			P25-1					.13	NO		19	
H 120	2		P27-G3					.18	NO		20	
			P30-6					.13	NO		18	

SIZE	CODE IDENT NO.	
A	80230	2014648
SCALE-NONE	REV LTR K	SHEET 22 OF 32

MIL 2084 9-65

LEAD IDENT	WIRE MATL ITEM	LEAD LG	CIRCUIT PT FROM (A) TO (B)	TERM. AREA NO.	JKT STRIP LG	SHLD STRIP LG	LEAD CUT LG	INS STRIP LG	TIN	NOTE ONE, FIG	ACCESSORY ITEMS	REMARKS
H 121	2		P27-G2					.18	NO		20	
			P31-6					.13	NO		18	
H 122			DELETED									
H 123			DELETED									
H 128			DELETED									
H 128G			DELETED									
H 128R			DELETED									
H 128Y			DELETED									
H 129	5											
H 129R			P25-14					.13	NO		19	
			P27-F6					.18	NO		21	
H 129Y			P25-32					.13	NO		19	
			P27-G6					.18	NO		21	
H 130			DELETED									
H 130R			DELETED									

SIZE	CODE IDENT NO.	
A	80230	2014648
SCALE-NONE	REV LTR L	SHEET 23 OF 32

MIL 2084 9-65

LEAD IDENT	WIRE MATL ITEM	LEAD LG	CIRCUIT PT FROM (A) TO (B)	TERM. AREA NO.	JKT STRIP LG	SHLD STRIP LG	LEAD CUT LG	INS STRIP LG	TIN	NOTE ONE, FIG	ACCESSORY ITEMS	REMARKS
H 130Y			DELETED									
H 131	8				1.00	.75				6B	53	
					1.75	1.50				6B	59	
H 131A	11		SHLD H131					.20	NO			
			P27-H2					.18	NO		20	
H 131B			DELETED									
H 131R			P27-K3					.18	NO		21	
			P30-17					.13	NO		18	
H 131Y			P27-H3					.18	NO		21	
			P30-18					.13	NO		18	
132	8				1.00	.75				6A	53	
					1.75	1.50				6B	53	
H 132A	11		SHLD H132					.20	NO			
			E16					.19	NO			
H 132B	9		P27-H6					.22	NO			
			SHLD H132					.20	NO			
H 132R			J5-19					.13	NO		19	
			P27-K6					.22	NO			
H 132Y			J5-18					.13	NO		19	
			P27-K7					.22	NO			
H 133	8				1.00	.75				6A	53	
					1.75	1.50				6B	53	

SIZE	CODE IDENT NO.	
A	80230	2014648
SCALE-NONE	REV LTR K	SHEET 24 OF 32

MIL 2084 9-65

LEAD IDENT	WIRE MATL ITEM	LEAD LG	CIRCUIT PT FROM (A) TO (B)	TERM. AREA NO.	JKT STRIP LG	SHLD STRIP LG	LEAD CUT LG	INS STRIP LG	TIN	NOTE ONE, FIG	ACCESSORY ITEMS	REMARKS
H 133A	11		SHLD H133					.20	NO			
			E17					.19	NO			
H 133B	9		P27-H6					.22	NO		20	
			SHLD H133					.20	NO			
H 133R			P25-38					.13	NO		19	
			P27-K6					.22	NO		20	
H 133Y			P25-40					.13	NO		19	
			P27-K7					.22	NO		20	
H 134	8				1.00	.75				6A	53	
					1.75	1.50				6A	53	
H 134A	11		SHLD H134					.20	NO			
			E16					.19	NO			
H 134B	11		E17					.19	NO			
			SHLD H134					.20	NO			
H 134R			J5-7					.13	NO		19	
			P25-5					.13	NO		19	
H 134Y			J5-8					.13	NO		19	
			P25-4					.13	NO		19	
H 135	4									6A	53	SEE NOTE 30
										6B	53	
H 135A	11		SHLD H135					.20	NO			
			E17					.19	NO		50	
H 135B	11		P31-11					.13	NO			
			SHLD H135					.20	NO			

SIZE	CODE IDENT NO.	
A	80230	2014648
SCALE-NONE	REV LTR K	SHEET 25 OF 32

MIL 2084 9-65

LEAD IDENT	WIRE MATL ITEM	LEAD LG	CIRCUIT PT FROM (A) TO (B)	TERM. AREA NO.	JKT STRIP LG	SHLD STRIP LG	LEAD CUT LG	INS STRIP LG	TIN	NOTE ONE, FIG	ACCESSORY ITEMS	REMARKS
H 135R			P25-62					.13	NO		19	
			P31-17					.13	NO			
H 135Y			P25-63					.13	NO		19	
			P31-18					.13	NO			
H 136	4									6A	53	SEE NOTE 30
										6B	53	
H 136A	11		SHLD H136					.20	NO			
			E18					.19	NO			
H 136B	11		P31-11					.13	NO			
			SHLD H136					.20	NO			
H 136R			P25-64					.13	NO		19	
			P31-17					.13	NO			
H 136Y			P25-65					.13	NO		19	
			P31-18					.13	NO			
H 137	4									6A	53	SEE NOTE 30
										6B	53	
H 137A	11		SHLD H137					.20	NO			
			E16					.19	NO		50	
H 137B	11		P31-11					.13	NO		18	
			SHLD H137					.20	NO			
H 137R			J5-9					.13	NO		19	
			P31-17					.13	NO		18	
H 137Y			J5-2					.13	NO		19	
			P31-18					.13	NO		18	

SIZE	CODE IDENT NO.	
A	80230	2014648
SCALE-NONE	REV LTR K	SHEET 26 OF 32

MIL 2084 9-65

LEAD IDENT	WIRE MATL ITEM	LEAD LG	CIRCUIT PT FROM (A) TO (B)	TERM. AREA NO.	JKT STRIP LG	SHLD STRIP LG	LEAD CUT LG	INS STRIP LG	TIN	NOTE ONE, FIG	ACCESSORY ITEMS	REMARKS
H 138	10		E15					.19	NO			A
			NONE									
H 139	10		E15					.19	NO		50	B
			E18					.19	NO		50	
H 141			DELETED									
H 142			DELETED									
H 143			DELETED									
H 144			DELETED									
H 145			DELETED									
H 146			DELETED									
H 147			DELETED									
H 148			DELETED									
H 149			DELETED									
H 150			DELETED									

SIZE	CODE IDENT NO.	
A	80230	2014648
SCALE-NONE	REV LTR K	SHEET 27 OF 32

MIL 2084 9-65

LEAD IDENT	WIRE MATL ITEM	LEAD LG	CIRCUIT PT FROM (A) TO (B)	TERM. AREA NO.	JKT STRIP LG	SHLD STRIP LG	LEAD CUT LG	INS STRIP LG	TIN	NOTE ONE, FIG	ACCESSORY ITEMS	REMARKS
H 151			DELETED									
H 152			DELETED									
H 153			DELETED									
H 154			DELETED									
H 157	2		P30-4					.13	NO			
			P31-4					.13	NO			
H 158	2		P30-14					.13	NO			
			P31-14					.13	NO			
H 159	2		P30-14					.13	NO			
			P31-14					.13	NO			
H 160	2		P30-15					.13	NO			
			P31-15					.13	NO			
H 161	2		P30-15					.13	NO			
			P31-15					.13	NO			
H 162	2		P30-16					.13	NO			
			P31-16					.13	NO			
H 163	2		P30-16					.13	NO		18	
			P31-16					.13	NO		18	
H 164	2		P30-3					.13	NO		18	
			P30-15					.13	NO		18	

SIZE	CODE IDENT NO.	
A	80230	2014648
SCALE-NONE	REV LTR K	SHEET 28 OF 32

MIL 2084 9-65

LEAD IDENT	WIRE MATL ITEM	LEAD LG	CIRCUIT PT FROM (A) TO (B)	TERM. AREA NO.	JKT STRIP LG	SHLD STRIP LG	LEAD CUT LG	INS STRIP LG	TIN	NOTE ONE, FIG	ACCESSORY ITEMS	REMARKS
H 165	2		P31-3					.13	NO		18	
			P31-15					.13	NO		18	
H 166	2		P30-1					.13	NO			A
			P31-1					.13	NO			
H 167	2		P30-1					.13	NO			A
			P31-1					.13	NO			
H 168	2		P27-B3					.18	NO		20	
			P30-7					.13	NO			
H 169	2		P27-B2					.18	NO		20	
			P31-7					.13	NO			
H 170	2		P27-B1					.18	NO		20	
			P30-14					.13	NO			
H 171	2		P27-C3					.18	NO		20	
			P30-7					.13	NO			
H 172	2		P27-C2					.18	NO		20	
			P31-7					.13	NO			
H 173	2		P27-C1					.18	NO		20	
			P30-14					.13	NO		18	
H 174	2		P27-D3					.18	NO		20	
			P30-7					.13	NO			
H 175	2		P27-D2					.18	NO		20	
			P31-7					.13	NO			
H 176	2		P27-D1					.18	NO		20	
			P31-14					.13	NO			

SIZE	CODE IDENT NO.	
A	80230	2014648
SCALE-NONE	REV LTR K	SHEET 29 OF 32

MIL 2084 9-65

LEAD IDENT	WIRE MATL ITEM	LEAD LG	CIRCUIT PT FROM (A) TO (B)	TERM. AREA NO.	JKT STRIP LG	SHLD STRIP LG	LEAD CUT LG	INS STRIP LG	TIN	NOTE ONE, FIG	ACCESSORY ITEMS	REMARKS
H 177	2		P27-F3					.18	NO		20	
			P30-7					.13	NO		18	
H 178	2		P27-F2					.18	NO		20	
			P31-7					.13	NO		18	
H 179	2		P27-F1					.18	NO		20	
			P31-14					.13	NO		18	
H 180	2		J5-53					.13	NO		19	A
			P30-2					.13	NO			
H 181	2		J5-78					.13	NO		19	A
			P31-2					.13	NO			
H 182	2		J5-54					.13	NO		19	A
			P30-1					.13	NO			
H 183	2		J5-79					.13	NO		19	A
			P30-2					.13	NO			
H 184	2		J5-80					.13	NO		19	A
			P31-2					.13	NO			
H 185	2		J5-55					.13	NO		19	A
			P30-1					.13	NO			
H 186	2		J5-33					.13	NO		19	A
			P30-2					.13	NO			
H 187	2		J5-32					.13	NO		19	A
			P31-2					.13	NO			
H 188	2		J5-16					.13	NO		19	A
			P30-1					.13	NO		18	

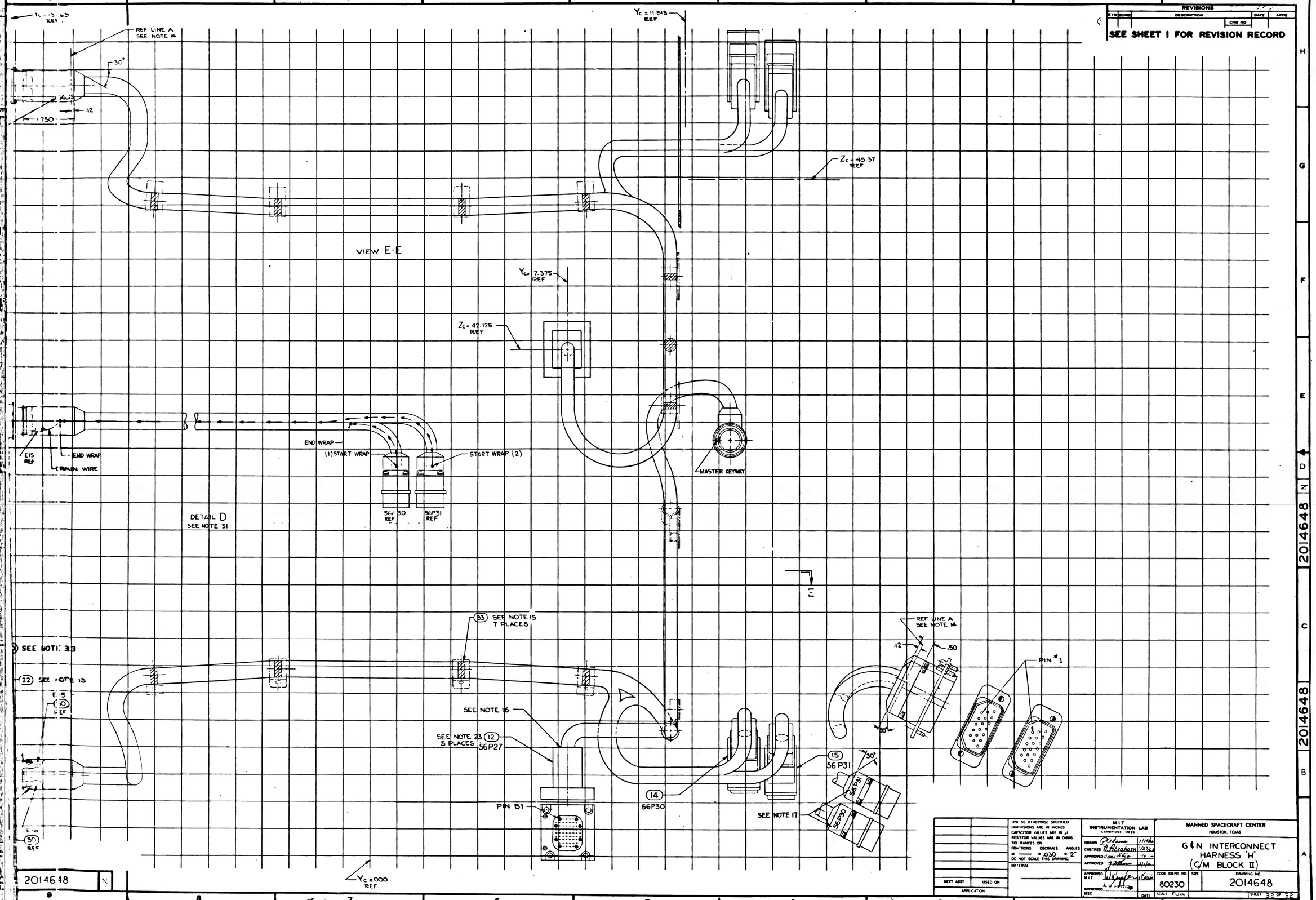
SIZE	CODE IDENT NO.	
A	80230	2014648
SCALE-NONE	REV LTR K	SHEET 30 OF 32

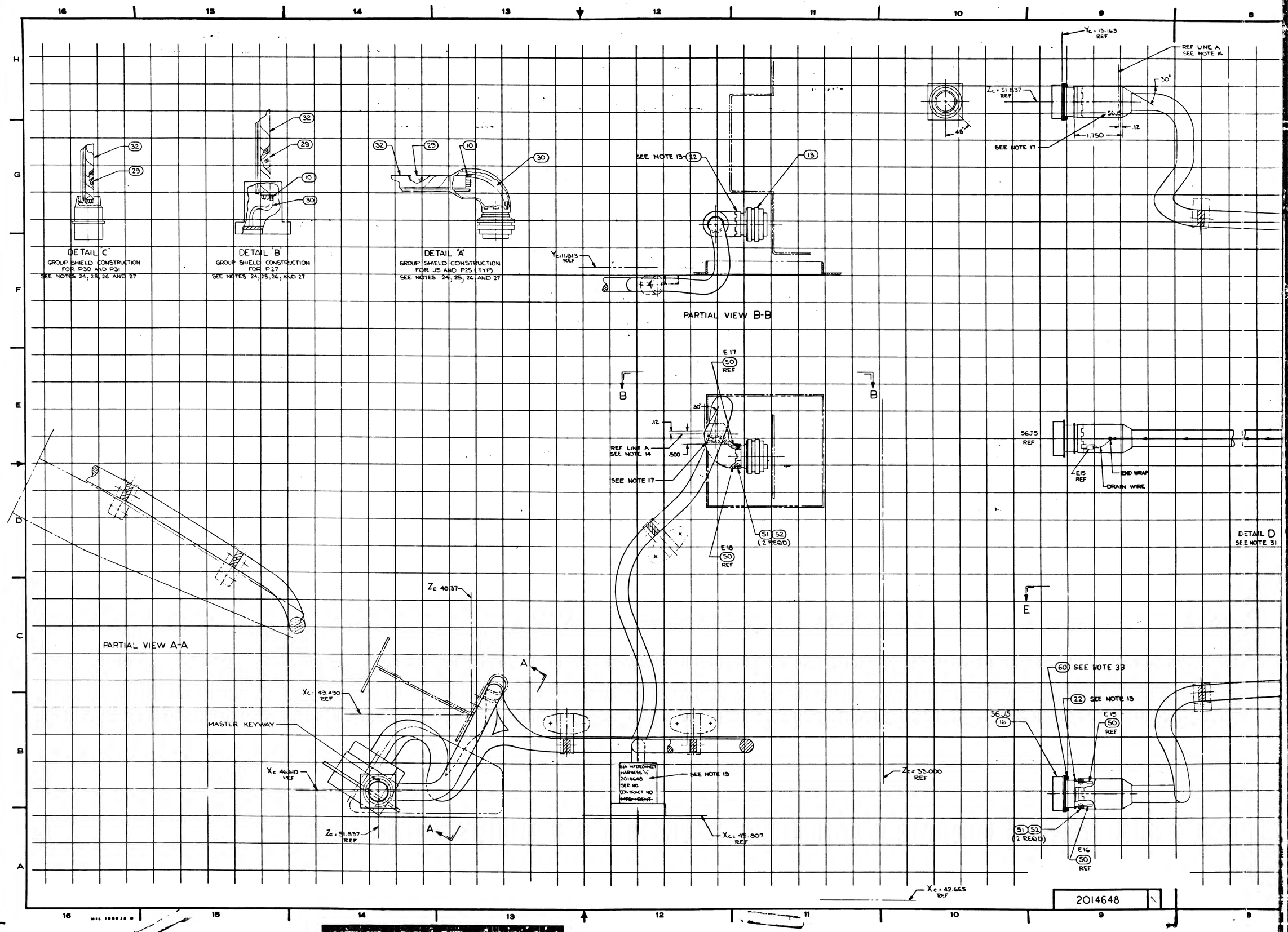
MIL 2084 9-65

LEAD IDENT	WIRE MATL ITEM	LEAD LG	CIRCUIT PT FROM (A) TO (B)	TERM. AREA NO.	JKT STRIP LG	SHLD STRIP LG	LEAD CUT LG	INS STRIP LG	TIN	NOTE ONE, FIG	ACCESSORY ITEMS	REMARKS
H 189	2		J5-81					.13	NO		19	A
			P30-2					.13	NO			
H 190	2		J5-57					.13	NO		19	A
			P31-2					.13	NO			
H 191	2		J5-56					.13	NO		19	A
			P31-1					.13	NO			
H 192	2		J5-58					.13	NO		19	A
			P30-2					.13	NO			
H 193	2		J5-34					.13	NO		19	A
			P31-2					.13	NO			
H 194	2		J5-35					.13	NO		19	A
			P31-1					.13	NO			
H 196	2		J5-60					.13	NO		19	
			P30-4					.13	NO		18	
H 197	2		J5-84					.13	NO		19	
			P31-4					.13	NO		18	
H 198	2		J5-31					.13	NO		19	A
			P30-2					.13	NO		18	
H 199	2		J5-15					.13	NO		19	A
			P31-2					.13	NO		18	
H 200	2		J5-5					.13	NO		19	A
			P31-1					.13	NO		18	
H 201	3		P25-15					.13	NO		19	
			P27-F5					.22	NO		20	

SIZE	CODE IDENT NO.	
A	80230	2014648
SCALE-NONE	REV LTR L	SHEET 31 OF 32

MIL 2084 9-65


REVISIONS
SYM ZONE DESCRIPTION DATE APPD
CHG NO
SEE SHEET 1 FOR REVISION RECORD
REF LINE A SEE NOTE 14
30°
.12
1.750
Y_c = 11.813 REF
Z_c = 48.37 REF
VIEW E-E
Y_c = 7.375 REF
Z_c = 42.125 REF
E15 REF
END WRAP
TRAIN WIRE
END WRAP
(1) START WRAP
START WRAP (2)
56P30 REF
56P31 REF
MASTER KEYWAY
DETAIL D
SEE NOTE 31
E
(33) SEE NOTE 15 7 PLACES
SEE NOTE 33
(22) SEE NOTE 13
E15 (10) REF
SEE NOTE 16
SEE NOTE 23 (12) 5 PLACES 56P27
PIN B1
(14) 56P30
(15) 56P31
SEE NOTE 17
REF LINE A SEE NOTE 14
.12
.50
PIN #1
E16 (51) REF
Y_c = .000 REF
2014648 N
UNLESS OTHERWISE SPECIFIED DIMENSIONS ARE IN INCHES
CAPACITOR VALUES ARE IN µf
RESISTOR VALUES ARE IN OHMS
TOLERANCES ON
FRACTIONS DECIMALS ANGLES
± — ±.030 ± 2°
DO NOT SCALE THIS DRAWING
MATERIAL
NEXT ASSY USED ON
APPLICATION
MIT INSTRUMENTATION LAB CAMBRIDGE MASS
DRAWN
CHECKED
APPROVED
APPROVED
APPROVED MIT
APPROVED MSC
DATE
MANNED SPACECRAFT CENTER HOUSTON, TEXAS
G&N INTERCONNECT HARNESS 'H' (C/M BLOCK II)
CODE IDENT NO 80230
SIZE
DRAWING NO. 2014648
SCALE FULL
SHEET 32 OF 32
2014648
2014648
2014648


DETAIL "C"
GROUP SHIELD CONSTRUCTION FOR P30 AND P31
SEE NOTES 24, 25, 26 AND 27
DETAIL "B"
GROUP SHIELD CONSTRUCTION FOR P27
SEE NOTES 24, 25, 26, AND 27
DETAIL "A"
GROUP SHIELD CONSTRUCTION FOR J5 AND P25 (TYP)
SEE NOTES 24, 25, 26, AND 27
PARTIAL VIEW B-B
PARTIAL VIEW A-A
DETAIL D
SEE NOTE 31
SEE NOTE 13
SEE NOTE 17
REF LINE A SEE NOTE 14
MASTER KEYWAY
SEE NOTE 19
SEE NOTE 33
END WRAP
DRAIN WIRE
2014648

1/2014648

APPLICATION		REVISIONS			
NEXT ASSY	USED ON	SYM	DESCRIPTION	DATE	APPROVAL
		F	REPLACES REV(E) WITH CHANGE PER TDRR		
		G	CHANGED PER TDRR 24813		
		H	Revised per TDRR 25306	2-4-66	
		J	REVISED PER TDRR 25887	11 FEB 66	
		K	REVISED PER TDRR 25888	3 MAR 66	JJ
		L	REVISED PER TDRR 27743	12-APR -66	B. RWH
		M	REVISED PER TDRR28361	4-MAY 66	B.
		N	REVISED PER TDRR 28849	23 MAY 66	PHG
		P	REVISED PER TDRR 29548	17 JUN 66	JIM P

REPLACES REV E WITH CHANGE

REV	K	K	L	K	K	K	K	K	K	L	N
SHEET	21	22	23	24	25	26	27	28	29	30	31	32
REV STATUS OF SHEETS REV							P	K	N	P	P	P
SHEET							1	2	3	4	5	6

REV STATUS OF SHEETS	N	P	P	P	K	K	K	K	K	K	K	K	K	K
SHEET	7	8	9	10	11	12	13	14	15	16	17	18	19	20

AC ELECTRONICS DIVISION
GENERAL MOTORS CORP MILWAUKEE WIS

MANNED SPACECRAFT CENTER
HOUSTON, TEXAS

DRAWN DATE 7 DEC 65
CHECKED 7 DEC 65
APPROVAL 10 DEC 65
APPROVAL DEC 20 65

G&N INTERCONNECT HARNESS "H"

(C/M, BLOCK II)

NASA APPROVAL
MIT APPROVAL 21 Dec 65

CODE IDENT NO.	SIZE		REV
80230	A	2014648	P

CONTRACT NAS9-497 SCALE SHEET 1 OF 32

NOTE NUMBER	GENERAL NOTES DESCRIPTION
1	SHIELD TERMINATION FIGURES ARE PER ND1002071 FOR FIG. 6A, 6B AND ND 1002032 FOR FIGURE 7.
2	INTERPRET DRAWING IN ACCORDANCE WITH STANDARDS PRESCRIBED BY MIL-D-70327.
3	INTERCONNECT LIST FOR THIS HARNESS IS 2014678.
4	PARTIAL CIRCUIT POINTS ARE SHOWN. PREFIX WITH UNIT NUMBER 56 FOR COMPLETE CIRCUIT POINT
5	THE SUFFIX LETTER OF A CONDUCTOR IDENTIFICATION NUMBER IDENTIFIES A SHIELD LEAD, COLOR, OR MARKED LETTER. A - FROM END OF SHIELD B - TO END OF SHIELD G - GREEN K - BLACK L - BLUE N - BROWN R - RED W - WHITE Y - YELLOW
6	ASTERISK DENOTES LOWER CASE LETTER
7	GRID MODULE ON PICTURE SHEET IS 1 INCH TRUE POSITION
8	UNLESS OTHERWISE SPECIFIED FEATURE CENTERLINES ON PICTURE SHEET ARE LOCATED WITHIN + OR - .25. ENDS OF HOOKUP WIRES OR ACCESSORIES ARE LOCATED WITHIN .12.
9	VENDOR ITEM - SEE SOURCE CONTROL OR SPECIFICATION CONTROL DRAWING.
10	CRIMP CONTACTS PER ND1002032.

NOTE NUMBER	GENERAL NOTES DESCRIPTION
11	ALL UNUSED CONTACT CAVITIES SHALL BE FILLED WITH A CONTACT OR CONTACT AND SEALING PLUG AS FOLLOWS CONNECTOR 56J5 AND P25 USE ITEM NUMBERS 19 AND 24. CONNECTOR 56P27, USE ITEM NUMBER 20. CONNECTOR 56P30, AND 31 USE ITEM NUMBERS 18 AND 23.
12	LACE HARNESS PER ND1002032 USING ITEM NUMBER 40.
13	APPLY BONDING MATERIAL PER ND1002187, TYPE 1, USING ITEMS 38 AND 39 TO THE THREADED PORTION OF CONNECTOR AND TO THE THREADED PORTION OF ADAPTER PRIOR TO ASSY.
14	ALL SHIELDED TERMINATIONS SHALL BE LOCATED BELOW REFERENCE LINE A. THERE SHALL BE NO EXPOSED CONDUCTORS OR ACCESSORIES AT THE SURFACE OF THE POTTING COMPOUND.
15	BEFORE LACING HARNESS, APPLY 2 TURNS OF TAPE TO INDICATE CABLE CLAMP LOCATION.
16	WRAP TAPE AROUND HARNESS IN AREA SHOWN AS REQUIRED TO BUILD UP DIAMETER TO FIT SHELL HOLE.
17	MARK CONNECTOR WITH REFERENCE DESIGNATION AS SHOWN .12 HIGH, BLACK, PER ND1002019, CENTRALIZE
19	MARK CHARACTERS .12 HIGH, BLACK, PER ND1002019, SERIALIZE PER ND1002023.
20	CONTINUITY TEST PER CONDUCTOR CHART. RESISTANCE SHALL BE LESS THAN 1/2 OHM. TEST PER MIL-STD-202, METHOD 303.

NOTE NUMBER	GENERAL NOTES DESCRIPTION
21	INSULATION RESISTANCE SHALL BE GREATER THAN 100 MEGOHMS WITH 500 VDC APPLIED BETWEEN A. THE ASSEMBLY PINS AND STRUCTURE GROUND, WITH THE EXCEPTION OF THOSE PINS ELECTRICALLY CONNECTED TO STRUCTURE GROUND AND THOSE PINS SPECIFIED IN PAR. B. B. EACH PIN AND ALL OTHER PINS NOT ELECTRICALLY CONNECTED, INCLUDING ALL SPARE PINS. TEST PER MIL-STD-202, METHOD 302, EXCEPT ELECTRIFICATION TIME NOT APPLICABLE. SHORT CIRCUIT CURRENT LIMITED TO 15 MILLIAMPS.
22	DELETED
23	ENCAPSULATE BACK OF CONNECTORS PER ND1002236 USING ITEMS 34 AND 35.
24	CONDUCTORS LISTED WITH AN A OR B IN THE REMARKS COLUMN ARE TO BE GROUP SHIELDED PER DETAILS A, B AND C OF THE CONFIGURATION DRAWING.
25	GROUP SHIELDING - THREAD ONE CONTINUOUS LENGTH OF GROUND WIRE, ITEM 10, THROUGH CENTER OF EMI/RFI SHIELDING TAPE, ITEM 29. ALLOW 6 INCHES OF GROUND WIRE TO EXTEND BEYOND ENDS OF SHIELDING TAPE. WRAP CABLE WITH ONE CONTINUOUS LENGTH OF PREPARED SHIELDING. SUCCESSIVE TURNS SHALL OVERLAP BY APPROXIMATELY 1/2 THE WIDTH OF THE TAPE, WITH A MINIMUM OF RIDGES AND FOLDS.
26	COMPLETELY COVER SHIELD WITH ONE CONTINUOUS WRAP OF INSULATION TAPE, ITEM 32. SUCCESSIVE TURNS SHALL OVERLAP BY APPROXIMATELY 1/2 THE WIDTH OF THE TAPE, WITH A MINIMUM OF RIDGES AND FOLDS. WRAP TAPE IN OPPOSITE DIRECTION TO SHIELD WRAP.
27	ASSEMBLE INSULATION TUBING, ITEM 30, OVER GROUND WIRE AS REQUIRED TO REACH TERMINATION. ASSEMBLE SHRINK SLEEVING AS SHOWN.

NOTE NUMBER	GENERAL NOTES DESCRIPTION
28	DELETED
29	DELETED
30	ASSEMBLE A LENGTH OF WIRE BRAID, ITEM 57, OVER CONDUCTORS H135, H136, AND H137. ALLOW 1.50 INCHES OF LEAD TO EXTEND BEYOND BRAID. COVER BRAID WITH TEFLON TAPE, ITEM 32, PER NOTE 26. ALLOW .25 INCH OF BRAID TO EXTEND BEYOND TAPE. FOLD BRAID OVER TAPE AND TERMINATE PER ND1002071, FIG. 6B.
31	NUMBERS INDICATE SEQUENCE IN WHICH GROUP SHIELD A IS TO BE WRAPPED. CUT DRAIN WIRE BACK 1/2 INCH WITHIN SHIELD WRAP AT P30 AND P31 ENDS.
32	PERFORM WORKMANSHIP VIBRATION A. SINUSOIDAL SWEEP AT 3.5 G RMS, LIMITED TO 0.3 INCH PEAK TO PEAK DISPLACEMENT, FROM 10 TO 2000 CPS AT A RATE OF 4 OCTAVES PER MINUTE. B. VIBRATION ALONG THE X AXIS OF THE SPACE CRAFT. C. MONITOR FOR DISCONTINUITIES OF 10 MICRO SECONDS OR GREATER DURING VIBRATION. D. COMPLETE CONTINUITY AND INSULATION RESISTANCE TESTING MUST BE ACCOMPLISHED AFTER VIBRATION.
33	BOND NUT PLATE ASSEMBLIES TO CONNECTOR 56J5 PER ND1002004, USING ITEMS 61 AND 62.
34	TO CRIMP LEADS TO CONTACTS OF CONNECTORS P30 AND P31, USE SHORT LENGTHS OF 22AWG WIRE TO BUILD UP LEAD DIAMETER TO FIT CONTACT BARREL. TOTAL NUMBER OF FUNCTIONAL AND DUMMY LEADS MUST EQUAL SIX PER CONTACT. TWIST LEADS TOGETHER BEFORE CRIMPING TO CONTACT. AFTER CRIMPING, CUT DUMMY LEADS FLUSH WITH TOP OF CONTACT.
35	SOLDER PER ND1002071, USING ITEMS 63 OR 64 AND 65.

NOTE NUMBER	GENERAL NOTES DESCRIPTION
36	ASSEMBLE INSULATION SLEEVE, ITEM 66 OVER EACH ELECTRICALLY CONNECTED PIN OF CONNECTOR P27. POSITION SLEEVING FLUSH TO TOP OF NYLON INSULATOR.

LEAD TOLERANCE CHART

	LEAD LG	JKT STRIP LG	SHIELD STRIP LG	LEAD CUT LG	INS STRIP LG
UNDER 3 INCHES	+ .12-.00	+.06-.06	+.06-.06	+.06-.06	+.06-.06
3 INCH TO 3 FT	+ .50-.00	+.25-.25	+.25-.25	+.25-.25	
3 FT TO 10 FT	+1.00-.00				
10 FT AND OVER	+2.00-.00				

SIZE	CODE IDENT NO.	
A	80230	2014648
SCALE-NONE	REV LTR P	SHEET 6 OF 32

SEE NOTE — LIST OF MATERIALS

NUMBER	ITEM	QTY	PART NO.	DESCRIPTION
	1			DELETED
	2	1	2014648-002	WIRE PER 1010789-006, 22 AWG, YEL, 240 FT TOT LG
	3	1	2014648-003	WIRE PER 1010789-016, 26 AWG, YEL, 170 FT TOT LG
	4	1	2014648-004	WIRE PER 1010789-006, 22 AWG, YEL, RED, 10 FT TOT LG
	5	1	2014648-005	WIRE PER 1010789-017, 26 AWG, YEL, RED, 8 FT TOT LG
	6			DELETED
	7	1	2014648-007	WIRE PER 1010789-019, 26 AWG, YEL, RED, GRN, BRN, 5 FT TOT LG
	8	1	2014648-008	WIRE PER 1010789-015, 26 AWG, YEL, RED, YEL JKT, 20 FT TOT LG
	9	1	2014648-009	WIRE PER 1010789-024, 26 AWG, BLK, 5 FT TOT LG
	10	1	2014648-010	WIRE PER QQ-W-343, TYPE C, CLASS C, UNCOATED SILVER PLATED, 22AWG 30 FT TOT LG.
	11	1	2014648-011	WIRE PER 1010789-002, 24 AWG, BLK, 5 FT TOT LG
	12	1	2014748-011	CONNECTOR, PLUG, ELECTRICAL, (56P27)
9	13	1	1010929-003	CONNECTOR, PLUG, ELECTRICAL, (56P25)
9	14	1	1010921- 1	CONNECTOR, PLUG, ELECTRICAL, (56P30)

SIZE	CODE IDENT NO.	
A	80230	2014648
SCALE-NONE	REV LTR N	SHEET 7 OF 32

SEE NOTE — LIST OF MATERIALS

NUMBER	ITEM	QTY	PART NO.	DESCRIPTION
9	15	1	1010921- 2	CONNECTOR, PLUG, ELECTRICAL, (56P31)
9	16	1	1010930-003	CONNECTOR, RECEPTACLE, ELECTRICAL (56J5)
9	18	36	1010932- 2	CONTACT, PIN
9	19	X	1010770- 2	CONTACT, SOCKET, SUPPLIED WITH CONNECTORS 1010929, AND 1010930.
9	20	56	1010955- 1	CONTACT, MALE
9	21	8	1010955- 2	CONTACT, MALE
	22	2	2014670- 13	ADAPTER, CONNECTOR
9	23	7	1010983- 1	PLUG, PROTECTIVE SEALING
9	24	39	1010958- 1	PLUG, PROTECTIVE SEALING
	25			DELETED
9	29	AR	1010989	TAPE, SHIELDING, EMI/RFI
9	30	AR	1006776- 19	INSULATION SLEEVING
	32	AR	MIL-T-23594	TAPE, TEFLON, TYPE II, 1 INCH WIDE
	33	AR	MIL-T-23594	TAPE, TEFLON, TYPE II, 1/4 INCH WIDE
9	34	AR	1012503	COMPOUND, POTTING, POLYURETHANE
9	35	AR	1012504	PRIMER, METAL PARTS
	36		1006277	DELETED
	37		1008822	DELETED

SIZE	CODE IDENT NO.	
A	80230	2014648
SCALE-NONE	REV LTR P	SHEET 8 OF 32

SEE NOTE — LIST OF MATERIALS

NUMBER	ITEM	QTY	PART NO.	DESCRIPTION
9	38	AR	1010661	EPOXY RESIN
9	39	AR	1010679	ADHESIVE ACTIVATOR
9	40	AR	1012507-004	TAPE, LACING AND TYING
	42			DELETED
	43			DELETED
	44			DELETED
	45			DELETED
	46			DELETED
	47			DELETED
	48			DELETED
	49			DELETED
	50	4	2021203	TERMINAL LUG SOLDER
	51	4	MS35333-69	WASHER, LOCK
9	52	4	1006783- 93	SCREW, BUTTON HD
9	53	13	1010402- 2	SLEEVE, SOLDER
	54			DELETED
	55			DELETED
	56			DELETED

SIZE	CODE IDENT NO.	
A	80230	2014648
SCALE-NONE	REV LTR P	SHEET 9 OF 32

SEE NOTE

LIST OF MATERIALS

NOTES	NUMBER ITEM	QTY	PART NO.	DESCRIPTION
	57	1	2014648-012	WIRE BRAID, QQ-B-575, .12 DIA, 36 AWG, 10 FT TOTAL LENGTH
	58			DELETED
9	59	1	1012534-36	SLEEVING, INSULATION, ELEC, (HEAT SHRINKABLE)
	60	1	2016725-011	NUT PLATE ASSEMBLY
9	61	AR	1010682	EPOXY RESIN
9	62	AR	1010683	CURING AGENT, AMINE
	63	AR	QQ-S-571	SOLDER SN 60 WRAP 2
	64	AR	QQ-S-571	SOLDER SN 60 WS
	65	AR	MIL-F-14256	FLUX, TYPE A
7	66	59	1010490-114	INSULATION SLEEVING (HEAT SHRINKABLE)

SIZE	CODE IDENT NO.	
A	80230	2014648
SCALE-NONE	REV LTR P	SHEET 10 OF 32

LEAD IDENT	WIRE MATL ITEM	LEAD LG	CIRCUIT PT FROM (A) TO (B)	TERM.JKT AREA NO.	STRIP LG	SHLD STRIP LG	LEAD CUT LG	INS STRIP LG	TIN	NOTE ONE, FIG	ACCESSORY ITEMS	REMARKS
H 1			DELETED									
H 2			DELETED									
H 3		2	P27-A6					.18	NO		20	
			P30-9					.13	NO			
H 4		2	P27-A7					.18	NO		20	
			P30-9					.13	NO			
H 5		2	P27-B6					.18	NO		20	
			P30-9					.13	NO			
H 6		2	P27-B7					.18	NO		20	
			P30-9					.13	NO		18	
H 7		2	P27-C6					.18	NO		20	
			P30-10					.13	NO			
H 8		2	P27-C7					.18	NO		20	
			P30-10					.13	NO			
H 9		2	P27-D6					.18	NO		20	
			P30-10					.13	NO		18	
H 10			DELETED									
H 11			DELETED									
H 12		2	P27-A3					.18	NO		20	
			P31-9					.13	NO			

SIZE	CODE IDENT NO.	
A	80230	2014648
SCALE-NONE	REV LTR K	SHEET 11 OF 32

LEAD IDENT	WIRE MATL ITEM	LEAD LG	CIRCUIT PT FROM (A) TO (B)	TERM.JKT AREA NO.	STRIP LG	SHLD STRIP LG	LEAD CUT LG	INS STRIP LG	TIN	NOTE ONE, FIG	ACCESSORY ITEMS	REMARKS
H 13		2	P27-A4					.18	NO		20	
			P31-9					.13	NO			
H 14		2	P27-A5					.18	NO		20	
			P31-9					.13	NO			
H 15		2	P27-B4					.18	NO		20	
			P31-9					.13	NO		18	
H 16		2	P27-B5					.18	NO		20	
			P31-10					.13	NO			
H 17		2	P27-C4					.18	NO		20	
			P31-10					.13	NO			
H 18		2	P27-C5					.18	NO		20	
			P31-10					.13	NO		18	
H 19			DELETED									
H 20		2	P27-F7					.18	NO		20	
			P30-8					.13	NO			
H 21		2	P27-G7					.18	NO		20	
			P30-8					.13	NO			
H 22		2	P27-H7					.18	NO		20	
			P30-8					.13	NO		18	
H 23			DELETED									
H 24		2	P27-F8					.18	NO		20	
			P31-8					.13	NO			

SIZE	CODE IDENT NO.	
A	80230	2014648
SCALE-NONE	REV LTR K	SHEET 12 OF 32

LEAD IDENT	WIRE MATL ITEM	LEAD LG	CIRCUIT PT FROM (A) TO (B)	TERM.JKT AREA NO.	STRIP LG	SHLD STRIP LG	LEAD CUT LG	INS STRIP LG	TIN	NOTE ONE, FIG	ACCESSORY ITEMS	REMARKS
H 25		2	P27-G8					.18	NO		20	
			P31-8					.13	NO			
H 26		2	P27-H8					.18	NO		20	
			P31-8					.13	NO		18	
H 27			DELETED									
H 28			DELETED									
H 29			DELETED									
H 30			DELETED									
H 31			DELETED									
H 32			DELETED									
H 33		2	P27-B9					.18	NO		20	
			P30-16					.13	NO			
H 34		2	P27-B9					.18	NO		20	
			P31-16					.13	NO			
H 35		2	P27-C8					.18	NO		20	
			P30-16					.13	NO			
H 36		2	P27-C9					.18	NO		20	
			P31-16					.13	NO			

SIZE	CODE IDENT NO.	
A	80230	2014648
SCALE-NONE	REV LTR K	SHEET 13 OF 32

LEAD IDENT	WIRE MATL ITEM	LEAD LG	CIRCUIT PT FROM (A) TO (B)	TERM. AREA NO.	JKT STRIP LG	SHLD STRIP LG	LEAD CUT LG	INS STRIP LG	TIN	NOTE ONE, FIG	ACCESSORY ITEMS	REMARKS
H 37	2		P27-D7 P31-15					.18 .13	NO NO		20	
H 38	2		P27-D8 P31-15					.18 .13	NO NO		20	
H 39	2		P27-D9 P30-15					.18 .13	NO NO		20	
H 40	2		P27-F9 P30-15					.18 .13	NO NO		20	
H 41	2		P27-G9 P30-3					.18 .13	NO NO		20	
H 42	2		P27-H9 P31-3					.18 .13	NO NO		20	
H 43			DELETED									
H 44			DELETED									
H 45			DELETED									
H 46			DELETED									
H 47			DELETED									
H 47G			DELETED									

SIZE	CODE IDENT NO.	
A	80230	2014648
SCALE-NONE	REV LTR K	SHEET 14 OF 32

LEAD IDENT	WIRE MATL ITEM	LEAD LG	CIRCUIT PT FROM (A) TO (B)	TERM. AREA NO.	JKT STRIP LG	SHLD STRIP LG	LEAD CUT LG	INS STRIP LG	TIN	NOTE ONE, FIG	ACCESSORY ITEMS	REMARKS
H 47R			DELETED									
H 47Y			DELETED									
H 48			DELETED									
H 48G			DELETED									
H 48R			DELETED									
H 48Y			DELETED									
H 49			DELETED									
H 49G			DELETED									
H 49R			DELETED									
H 49Y			DELETED									
H 50			DELETED									
H 50G			DELETED									

SIZE	CODE IDENT NO.	
A	80230	2014648
SCALE-NONE	REV LTR K	SHEET 15 OF 32

LEAD IDENT	WIRE MATL ITEM	LEAD LG	CIRCUIT PT FROM (A) TO (B)	TERM. AREA NO.	JKT STRIP LG	SHLD STRIP LG	LEAD CUT LG	INS STRIP LG	TIN	NOTE ONE, FIG	ACCESSORY ITEMS	REMARKS
H 50R			DELETED									
H 50Y			DELETED									
H 51			DELETED									
H 52			DELETED									
H 53			DELETED									
H 54			DELETED									
H 55			DELETED									
H 55G			DELETED									
H 55R			DELETED									
H 55Y			DELETED									
H 56			DELETED									
H 56G			DELETED									

SIZE	CODE IDENT NO.	
A	80230	2014648
SCALE-NONE	REV LTR K	SHEET 16 OF 32

LEAD IDENT	WIRE MATL ITEM	LEAD LG	CIRCUIT PT FROM (A) TO (B)	TERM. AREA NO.	JKT STRIP LG	SHLD STRIP LG	LEAD CUT LG	INS STRIP LG	TIN	NOTE ONE, FIG	ACCESSORY ITEMS	REMARKS
H 56R			DELETED									
H 56Y			DELETED									
H 57			DELETED									
H 57G			DELETED									
H 57R			DELETED									
H 57Y			DELETED									
H 58			DELETED									
H 58G			DELETED									
H 58R			DELETED									
H 58Y			DELETED									
H 59			DELETED									
H 59G			DELETED									

SIZE	CODE IDENT NO.	
A	80230	2014648
SCALE-NONE	REV LTR K	SHEET 17 OF 32

LEAD IDENT	WIRE MATL ITEM	LEAD LG	CIRCUIT PT FROM (A) TO (B)	TERM.JKT AREA NO.	SHLD STRIP LG	LEAD CUT LG	INS STRIP LG	TIN	NOTE ONE, FIG	ACCESSORY ITEMS	REMARKS
H 59R			DELETED								
H 59Y			DELETED								
H 61			DELETED								
H 62			DELETED								
H 63R			DELETED								
H 63Y			DELETED								
H 67	5										
H 67R			P25-83				.13	NO		19	
			P27-K5				.18	NO		21	
H 67Y			P25-84				.13	NO		19	
			P27-K4				.18	NO		21	
H 68	7										
H 68G			P25-55				.13	NO		19	
			P27-H4				.22	NO			
H 68N			P25-53				.13	NO		19	
			P27-H4				.22	NO		20	

SIZE	CODE IDENT NO.	
A	80230	2014648
SCALE-NONE	REV LTR K	SHEET 18 OF 32

LEAD IDENT	WIRE MATL ITEM	LEAD LG	CIRCUIT PT FROM (A) TO (B)	TERM.JKT AREA NO.	SHLD STRIP LG	LEAD CUT LG	INS STRIP LG	TIN	NOTE ONE, FIG	ACCESSORY ITEMS	REMARKS
H 68R			P25-31				.13	NO		19	
			P27-H5				.18	NO		21	
H 68Y			P25-54				.13	NO		19	
			P27-G5				.18	NO		21	
H 69	2		P25-57				.13	NO		19	
			P27-G4				.18	NO		20	
H 70	3		J5-62				.13	NO		19	B
			P25-51				.13	NO		19	
H 71	3		J5-63				.13	NO		19	B
			P25-78				.13	NO		19	
H 72	3		J5-38				.13	NO		19	B
			P25-77				.13	NO		19	
H 73	3		J5-40				.13	NO		19	B
			P25-76				.13	NO		19	
H 74	3		J5-39				.13	NO		19	B
			P25-79				.13	NO		19	
H 75	3		J5-64				.13	NO		19	B
			P25-49				.13	NO		19	
H 76	2		J5-66				.13	NO		19	B
			P25-30				.13	NO		19	
H 77	3		J5-65				.13	NO		19	B
			P25-75				.13	NO		19	
H 78	2		J5-41				.13	NO		19	B
			P25-28				.13	NO		19	

SIZE	CODE IDENT NO.	
A	80230	2014648
SCALE-NONE	REV LTR K	SHEET 19 OF 32

LEAD IDENT	WIRE MATL ITEM	LEAD LG	CIRCUIT PT FROM (A) TO (B)	TERM.JKT AREA NO.	SHLD STRIP LG	LEAD CUT LG	INS STRIP LG	TIN	NOTE ONE, FIG	ACCESSORY ITEMS	REMARKS
H 79	2		J5-42				.13	NO		19	B
			P25-48				.13	NO		19	
H 80	3		J5-52				.13	NO		19	B
			P25-2				.13	NO		19	
H 81	3		J5-76				.13	NO		19	B
			P25-9				.13	NO		19	
H 82	3		J5-30				.13	NO		19	B
			P25-22				.13	NO		19	
H 83	3		J5-29				.13	NO		19	B
			P25-41				.13	NO		19	
H 84	3		J5-14				.13	NO		19	B
			P25-66				.13	NO		19	
H 85	3		J5-50				.13	NO		19	B
			P25-3				.13	NO		19	
H 86	3		J5-74				.13	NO		19	B
			P25-10				.13	NO		19	
H 87	3		J5-75				.13	NO		19	B
			P25-23				.13	NO		19	
H 88	3		J5-51				.13	NO		19	B
			P25-42				.13	NO		19	
H 89	3		J5-77				.13	NO		19	B
			P25-67				.13	NO		19	
H 90	3		J5-27				.13	NO		19	B
			P25-12				.13	NO		19	

SIZE	CODE IDENT NO.	
A	80230	2014648
SCALE-NONE	REV LTR K	SHEET 20 OF 32

LEAD IDENT	WIRE MATL ITEM	LEAD LG	CIRCUIT PT FROM (A) TO (B)	TERM.JKT AREA NO.	SHLD STRIP LG	LEAD CUT LG	INS STRIP LG	TIN	NOTE ONE, FIG	ACCESSORY ITEMS	REMARKS
H 91	3		J5-13				.13	NO		19	B
			P25-11				.13	NO		19	
H 92	3		J5-28				.13	NO		19	B
			P25-24				.13	NO		19	
H 93	3		J5-73				.13	NO		19	B
			P25-43				.13	NO		19	
H 94	3		J5-49				.13	NO		19	B
			P25-68				.13	NO		19	
H 95	2		J5-45				.13	NO		19	B
			P25-7				.13	NO		19	
H 96	3		J5-72				.13	NO		19	B
			P25-27				.13	NO		19	
H 97	3		J5-48				.13	NO		19	B
			P25-45				.13	NO		19	
H 98	3		J5-47				.13	NO		19	B
			P25-26				.13	NO		19	
H 99	3		J5-71				.13	NO		19	B
			P25-25				.13	NO		19	
H 100	3		J5-4				.13	NO		19	B
			P25-47				.13	NO		19	
H 101	3		J5-22				.13	NO		19	B
			P25-70				.13	NO		19	
H 102	3		J5-46				.13	NO		19	B
			P25-46				.13	NO		19	

SIZE	CODE IDENT NO.	
A	80230	2014648
SCALE-NONE	REV LTR K	SHEET 21 OF 32

LEAD IDENT	WIRE MATL ITEM	LEAD LG	CIRCUIT PT FROM (A) TO (B)	TERM. AREA NO.	JKT STRIP LG	SHLD STRIP LG	LEAD CUT LG	INS STRIP LG	TIN	NOTE ONE, FIG	ACCESSORY ITEMS	REMARKS
H 103	2		J5-7C					.13	NO		19	D
			P25-73					.13	NO		19	
H 104	3		J5-25					.13	NO		19	B
			P25-13					.13	NO		19	
H 105	3		J5-26					.13	NO		19	B
			P25-72					.13	NO		19	
H 106	3		J5-11					.13	NO		19	B
			P25-74					.13	NO		19	
H 107	3		J5-23					.13	NO		19	B
			P25-44					.13	NO		19	
H 108	3		J5-12					.13	NO		19	B
			P25-71					.13	NO		19	
H 109	3		J5-10					.13	NO		19	B
			P25-69					.13	NO		19	
H 110	3		J5-24					.13	NO		19	B
			P25-18					.13	NO		19	
H 111	2		J5-44					.13	NO		19	B
			P25-21					.13	NO		19	
H 112	2		J5-68					.13	NO		19	B
			P25-8					.13	NO		19	
H 113	2		J5-43					.13	NO		19	B
			P25-1					.13	NO		19	
H 120	2		P27-G3					.18	NO		20	
			P30-6					.13	NO		18	

SIZE	CODE IDENT NO.	
A	80230	2014648
SCALE-NONE	REV LTR K	SHEET 22 OF 32

LEAD IDENT	WIRE MATL ITEM	LEAD LG	CIRCUIT PT FROM (A) TO (B)	TERM. AREA NO.	JKT STRIP LG	SHLD STRIP LG	LEAD CUT LG	INS STRIP LG	TIN	NOTE ONE, FIG	ACCESSORY ITEMS	REMARKS
H 121	2		P27-G2					.18	NO		20	
			P31-6					.13	NO		18	
H 122			DELETED									
H 123			DELETED									
H 128			DELETED									
H 128G			DELETED									
H 128R			DELETED									
H 128Y			DELETED									
H 129	5											
H 129R			P25-14					.13	NO		19	
			P27-F6					.18	NO		21	
H 129Y			P25-32					.13	NO		19	
			P27-G6					.18	NO		21	
H 130			DELETED									
H 130R			DELETED									

SIZE	CODE IDENT NO.	
A	80230	2014648
SCALE-NONE	REV LTR L	SHEET 23 OF 32

LEAD IDENT	WIRE MATL ITEM	LEAD LG	CIRCUIT PT FROM (A) TO (B)	TERM. AREA NO.	JKT STRIP LG	SHLD STRIP LG	LEAD CUT LG	INS STRIP LG	TIN	NOTE ONE, FIG	ACCESSORY ITEMS	REMARKS
H 130Y			DELETED									
H 131	8				1.00	.75				6B	53	
					1.75	1.50				6B	59	
H 131A	11		SHLD H131					.20	NO			
			P27-H2					.18	NO		20	
H 131B			DELETED									
H 131R			P27-K3					.18	NO		21	
			P30-17					.13	NO		18	
H 131Y			P27-H3					.18	NO		21	
			P30-18					.13	NO		18	
H 132	8				1.00	.75				6A	53	
					1.75	1.50				6B	53	
H 132A	11		SHLD H132					.20	NO			
			F16					.19	NO			
H 132B	9		P27-H6					.22	NO			
			SHLD H132					.20	NO			
H 132R			J5-19					.13	NO		19	
			P27-K6					.22	NO			
H 132Y			J5-18					.13	NO		19	
			P27-K7					.22	NO			
H 133	8				1.00	.75				6A	53	
					1.75	1.50				6B	53	

SIZE	CODE IDENT NO.	
A	80230	2014648
SCALE-NONE	REV LTR K	SHEET 24 OF 32

LEAD IDENT	WIRE MATL ITEM	LEAD LG	CIRCUIT PT FROM (A) TO (B)	TERM. AREA NO.	JKT STRIP LG	SHLD STRIP LG	LEAD CUT LG	INS STRIP LG	TIN	NOTE ONE, FIG	ACCESSORY ITEMS	REMARKS
H 133A	11		SHLD H133					.20	NO			
			F17					.19	NO			
H 133B	9		P27-H6					.22	NO		20	
			SHLD H133					.20	NO			
H 133R			P25-38					.13	NO		19	
			P27-K6					.22	NO		20	
H 133Y			P25-40					.13	NO		19	
			P27-K7					.22	NO		20	
H 134	8				1.00	.75				6A	53	
					1.75	1.50				6A	53	
H 134A	11		SHLD H134					.20	NO			
			F16					.19	NO			
H 134B	11		F17					.19	NO			
			SHLD H134					.20	NO			
H 134R			J5-7					.13	NO		19	
			P25-5					.13	NO		19	
H 134Y			J5-8					.13	NO		19	
			P25-4					.13	NO		19	
H 135	4									6A	53	SEE NOTE 30
										6B	53	
H 135A	11		SHLD H135					.20	NO			
			F17					.19	NO		50	
H 135B	11		P31-11					.13	NO			
			SHLD H135					.20	NO			

SIZE	CODE IDENT NO.	
A	80230	2014648
SCALE-NONE	REV LTR K	SHEET 25 OF 32

LEAD IDENT	WIRE MATL ITEM	LEAD LG	CIRCUIT PT FROM (A) TO (B)	TERM.JKT AREA NO.	STRIP LG	SHLD STRIP LG	LEAD CUT LG	INS STRIP LG	TIN	NOTE ONE, FIG	ACCESSORY ITEMS	REMARKS
H 135R			P25-62					.13	NO		19	
			P31-17					.13	NO			
H 135Y			P25-63					.13	NO		19	
			P31-18					.13	NO			
H 136	4									6A	53	SEE NOTE 30
										6B	53	
H 136A	11		SHLD H136					.20	NO			
			E18					.19	NO			
H 136B	11		P31-11					.13	NO			
			SHLD H136					.20	NO			
H 136R			P25-64					.13	NO		19	
			P31-17					.13	NO			
H 136Y			P25-65					.13	NO		19	
			P31-18					.13	NO			
H 137	4									6A	53	SEE NOTE 30
										6B	53	
H 137A	11		SHLD H137					.20	NO			
			E16					.19	NO		50	
H 137B	11		P31-11					.13	NO		18	
			SHLD H137					.20	NO			
H 137R			J5-9					.13	NO		19	
			P31-17					.13	NO		18	
H 137Y			J5-2					.13	NO		19	
			P31-18					.13	NO		18	

LEAD IDENT	WIRE MATL ITEM	LEAD LG	CIRCUIT PT FROM (A) TO (B)	TERM.JKT AREA NO.	STRIP LG	SHLD STRIP LG	LEAD CUT LG	INS STRIP LG	TIN	NOTE ONE, FIG	ACCESSORY ITEMS	REMARKS
H 138	10		E15					.19	NO			A
			NONE									
H 139	10		E15					.19	NO		50	B
			E18					.19	NO		50	
H 141			DELETED									
H 142			DELETED									
H 143			DELETED									
H 144			DELETED									
H 145			DELETED									
H 146			DELETED									
H 147			DELETED									
H 148			DELETED									
H 149			DELETED									
H 150			DELETED									

LEAD IDENT	WIRE MATL ITEM	LEAD LG	CIRCUIT PT FROM (A) TO (B)	TERM.JKT AREA NO.	STRIP LG	SHLD STRIP LG	LEAD CUT LG	INS STRIP LG	TIN	NOTE ONE, FIG	ACCESSORY ITEMS	REMARKS
H 151			DELETED									
H 152			DELETED									
H 153			DELETED									
H 154			DELETED									
H 157	2		P30-4					.13	NO			
			P31-4					.13	NO			
H 158	2		P30-14					.13	NO			
			P31-14					.13	NO			
H 159	2		P30-14					.13	NO			
			P31-14					.13	NO			
H 160	2		P30-15					.13	NO			
			P31-15					.13	NO			
H 161	2		P30-15					.13	NO			
			P31-15					.13	NO			
H 162	2		P30-16					.13	NO			
			P31-16					.13	NO			
H 163	2		P30-16					.13	NO		18	
			P31-16					.13	NO		18	
H 164	2		P30-3					.13	NO		18	
			P30-15					.13	NO		18	

LEAD IDENT	WIRE MATL ITEM	LEAD LG	CIRCUIT PT FROM (A) TO (B)	TERM.JKT AREA NO.	STRIP LG	SHLD STRIP LG	LEAD CUT LG	INS STRIP LG	TIN	NOTE ONE, FIG	ACCESSORY ITEMS	REMARKS
H 165	2		P31-3					.13	NO		18	
			P31-15					.13	NO		18	
H 166	2		P30-1					.13	NO			A
			P31-1					.13	NO			
H 167	2		P30-1					.13	NO			A
			P31-1					.13	NO			
H 168	2		P27-B3					.18	NO		20	
			P30-7					.13	NO			
H 169	2		P27-B2					.18	NO		20	
			P31-7					.13	NO			
H 170	2		P27-B1					.18	NO		20	
			P30-14					.13	NO			
H 171	2		P27-C3					.18	NO		20	
			P30-7					.13	NO			
H 172	2		P27-C2					.18	NO		20	
			P31-7					.13	NO			
H 173	2		P27-C1					.18	NO		20	
			P30-14					.13	NO		18	
H 174	2		P27-D3					.18	NO		20	
			P30-7					.13	NO			
H 175	2		P27-D2					.18	NO		20	
			P31-7					.13	NO			
H 176	2		P27-D1					.18	NO		20	
			P31-14					.13	NO			

LEAD IDENT	WIRE MATL ITEM	LEAD LG	CIRCUIT PT FROM (A) TO (B)	TERM. AREA NO.	JKT STRIP LG	SHLD STRIP LG	LEAD CUT LG	INS STRIP LG	TIN	NOTE ONE, FIG	ACCESSORY ITEMS	REMARKS
H 177	2		P27-F3					.18	NO		20	
			P30-7					.13	NO		18	
H 178	2		P27-F2					.18	NO		20	
			P31-7					.13	NO		18	
H 179	2		P27-F1					.18	NO		20	
			P31-14					.13	NO		18	
H 180	2		J5-53					.13	NO		19	A
			P30-2					.13	NO			
H 181	2		J5-78					.13	NO		19	A
			P31-2					.13	NO			
H 182	2		J5-54					.13	NO		19	A
			P30-1					.13	NO			
H 183	2		J5-79					.13	NO		19	A
			P30-2					.13	NO			
H 184	2		J5-80					.13	NO		19	A
			P31-2					.13	NO			
H 185	2		J5-55					.13	NO		19	A
			P30-1					.13	NO			
H 186	2		J5-33					.13	NO		19	A
			P30-2					.13	NO			
H 187	2		J5-32					.13	NO		19	A
			P31-2					.13	NO			
H 188	2		J5-16					.13	NO		19	A
			P30-1					.13	NO		18	

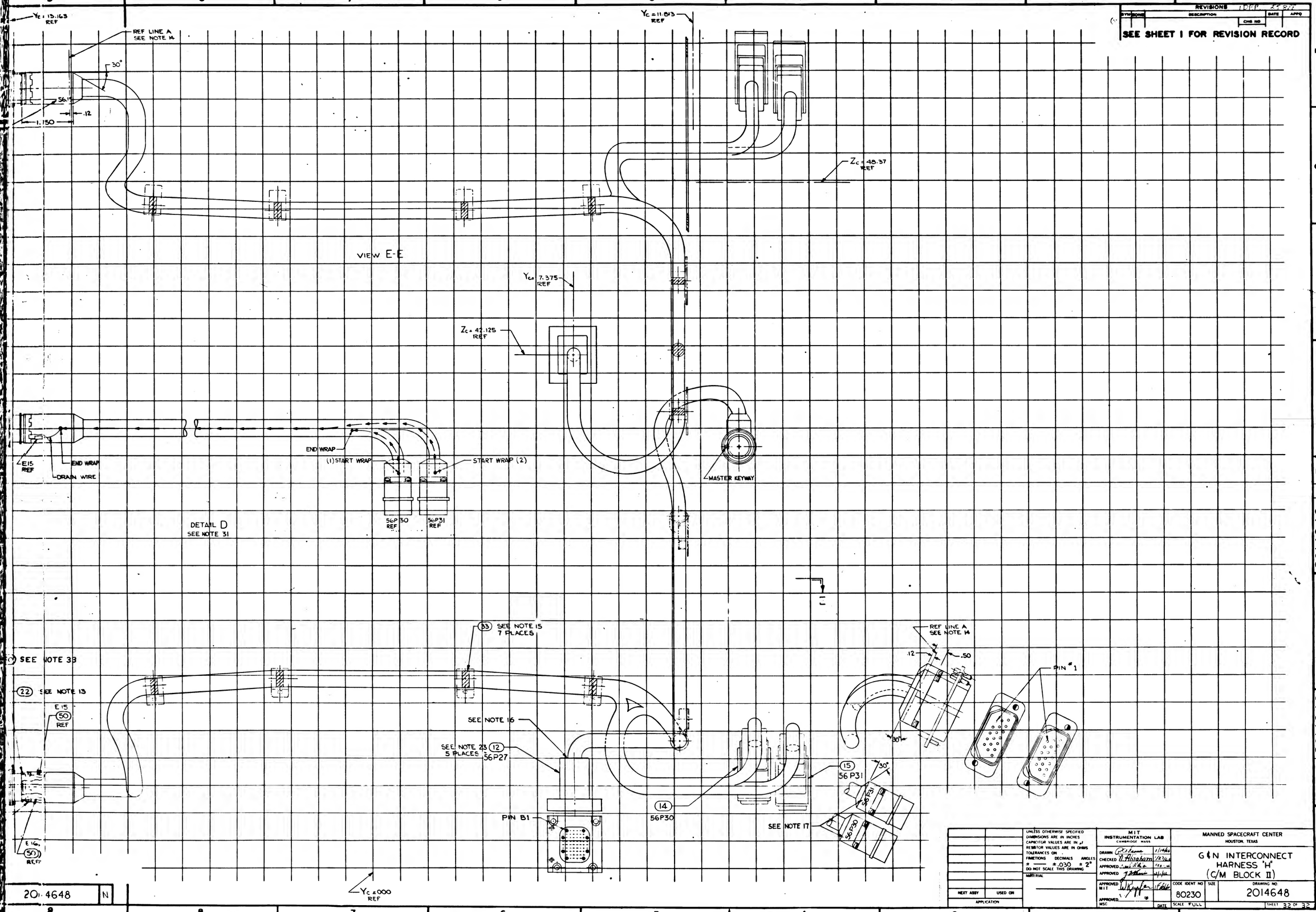
SIZE	CODE IDENT NO.	
A	80230	2014648

SCALE-NONE | REV LTR K | SHEET 30 OF 32

LEAD IDENT	WIRE MATL ITEM	LEAD LG	CIRCUIT PT FROM (A) TO (B)	TERM. AREA NO.	JKT STRIP LG	SHLD STRIP LG	LEAD CUT LG	INS STRIP LG	TIN	NOTE ONE, FIG	ACCESSORY ITEMS	REMARKS
H 189	2		J5-81					.13	NO		19	A
			P30-2					.13	NO			
H 190	2		J5-57					.13	NO		19	A
			P31-2					.13	NO			
H 191	2		J5-56					.13	NO		19	A
			P31-1					.13	NO			
H 192	2		J5-58					.13	NO		19	A
			P30-2					.13	NO			
H 193	2		J5-34					.13	NO		19	A
			P31-2					.13	NO			
H 194	2		J5-35					.13	NO		19	A
			P31-1					.13	NO			
H 196	2		J5-60					.13	NO		19	
			P30-4					.13	NO		18	
H 197	2		J5-84					.13	NO		19	
			P31-4					.13	NO		18	
H 198	2		J5-31					.13	NO		19	A
			P30-2					.13	NO		18	
H 199	2		J5-15					.13	NO		19	A
			P31-2					.13	NO		18	
H 200	2		J5-5					.13	NO		19	A
			P31-1					.13	NO		18	
H 201	3		P25-15					.13	NO		19	
			P27-F5					.22	NO		20	

SIZE	CODE IDENT NO.	
A	80230	2014648

SCALE-NONE | REV LTR L | SHEET 31 OF 32



REVISIONS

SYM	ZONE	DESCRIPTION	CHG NO	DATE	APPD

SEE SHEET 1 FOR REVISION RECORD

NEXT ASSY	USED ON	
APPLICATION		

UNLESS OTHERWISE SPECIFIED DIMENSIONS ARE IN INCHES
CAPACITOR VALUES ARE IN μf
RESISTOR VALUES ARE IN OHMS
TOLERANCES ON
FRACTIONS ± — DECIMALS ± .030 ANGLES ± 2°
DO NOT SCALE THIS DRAWING
MATERIAL

MIT INSTRUMENTATION LAB CAMBRIDGE MASS

		DATE
DRAWN	[illegible]	1/14/66
CHECKED	N. Abraham	1/21/66
APPROVED	[illegible]	[illegible]
APPROVED	[illegible]	1/14/66
APPROVED MIT	[illegible]	[illegible]
APPROVED MSC		

MANNED SPACECRAFT CENTER HOUSTON, TEXAS

G&N INTERCONNECT HARNESS 'H' (C/M BLOCK II)

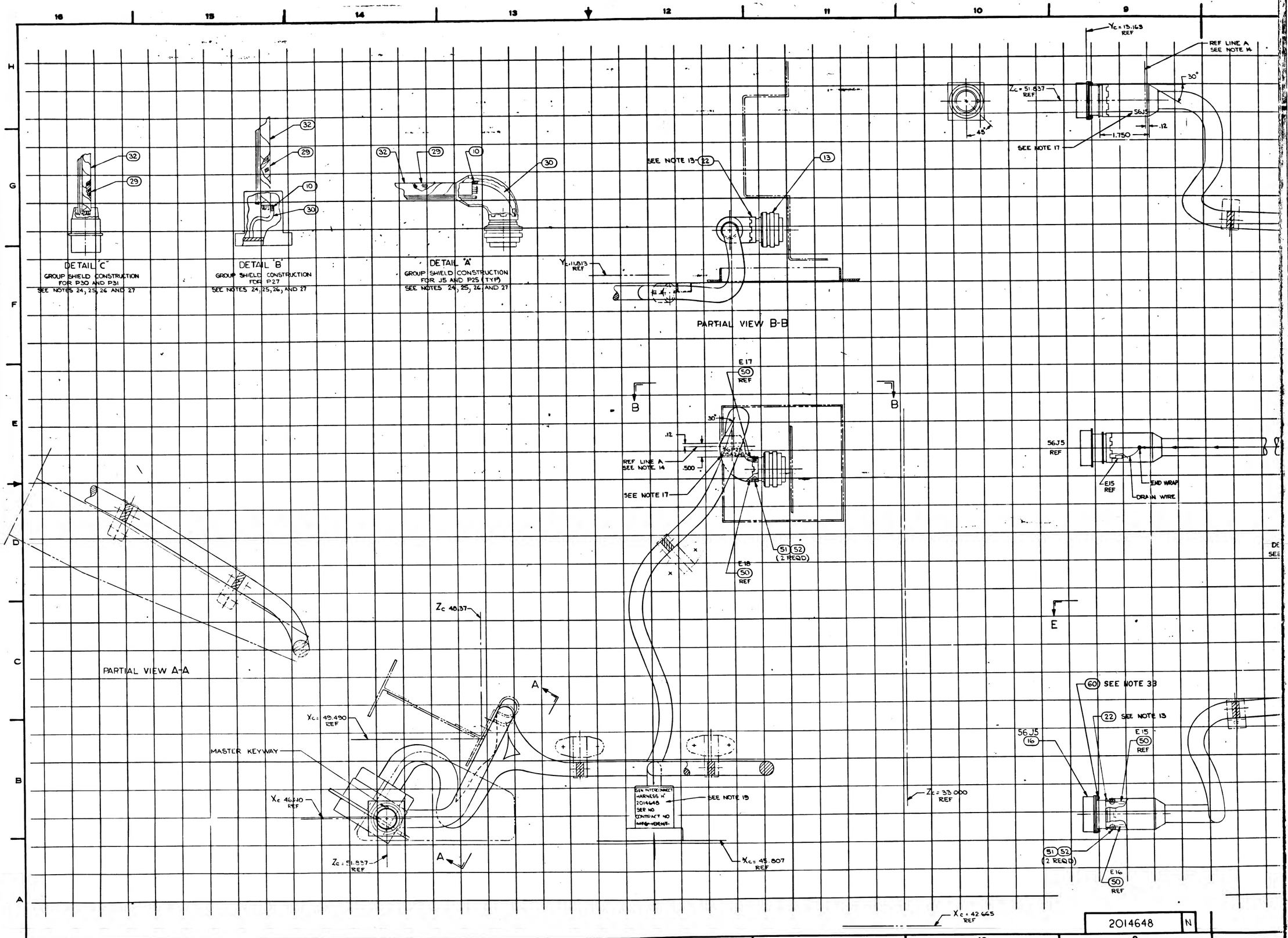
CODE IDENT NO	SIZE	DRAWING NO
80230		2014648

SCALE FULL SHEET 32 OF 32

2014648 N

2014648

2/2014648


DETAIL "C"
GROUP SHIELD CONSTRUCTION FOR P30 AND P31
SEE NOTES 24, 25, 26 AND 27
DETAIL "B"
GROUP SHIELD CONSTRUCTION FOR P27
SEE NOTES 24, 25, 26, AND 27
DETAIL "A"
GROUP SHIELD CONSTRUCTION FOR J5 AND P25 (TYP)
SEE NOTES 24, 25, 26, AND 27
PARTIAL VIEW B-B
PARTIAL VIEW A-A
SEE NOTE 13
SEE NOTE 17
REF LINE A SEE NOTE 14
MASTER KEYWAY
GEN INTERCONNECT HARNESS W 2014648 SEE NO CONTRACT NO
SEE NOTE 19
SEE NOTE 33
END WRAP
DRAIN WIRE
2014648
N

APPLICATION		REVISIONS			
NEXT ASSY	USED ON	SYM	DESCRIPTION	DATE	APPROVAL
		F	REPLACES REV(E) WITH CHANGE PER TDRR		
		G	CHANGED PER TDRR 24813		
		H	Revised per TDRR 25306	2-4-66	
		J	REVISED PER TDRR 25887	11 FEB 66	PLP DAH
		K	REVISED PER TDRR 25888	3 MAR 66	JJJ DAH
		L	REVISED PER TDRR 27743	12-APR -66	B. RWH
		M	REVISED PER TDRR28361	4-MAY 66	B.
		N	REVISED PER TDRR 28849	23 MAY 66	PHG CP
		P	REVISED PER TDRR 29548	17 JUN 66	JIM P
		R	REVISED PER TDRR 29714	24 66	K

REPLACES REV E WITH CHANGE

REV	K	K	L	K	K	K	K	K	K	L	R
SHEET	21	22	23	24	25	26	27	28	29	30	31	32
REV STATUS OF SHEETS	REV						R	K	N	P	P	P	N	P	P	P	K	K	K	K	K	K	K	K	K	K
	SHEET						1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16	17	18	19	20

AC ELECTRONICS DIVISION
GENERAL MOTORS CORP. MILWAUKEE WIS

MANNED
SPACECRAFT CENTER
HOUSTON, TEXAS

DRAWN R. Parker DATE 9 Dec 65
CHECKED W. Diehl 9 DEC 65
APPROVAL E. HENDERSON 10 DEC 65
APPROVAL A. J. Kerns 10 DEC 65

G & N INTERCONNECT HARNESS "H"

(C/M, BLOCK II)

NASA APPROVAL
MIT APPROVAL

CODE IDENT NO.	SIZE		REV
80230	A	2014648	R

CONTRACT NAS9-497 | SCALE | SHEET 1 OF 32

NOTE NUMBER	GENERAL NOTES DESCRIPTION
1	SHIELD TERMINATION FIGURES ARE PER ND1002071 FOR FIG. 6A, 6B AND ND 1002032 FOR FIGURE 7.
2	INTERPRET DRAWING IN ACCORDANCE WITH STANDARDS PRESCRIBED BY MIL-D-70327.
3	INTERCONNECT LIST FOR THIS HARNESS IS 2014678.
4	PARTIAL CIRCUIT POINTS ARE SHOWN. PREFIX WITH UNIT NUMBER 56 FOR COMPLETE CIRCUIT POINT
5	THE SUFFIX LETTER OF A CONDUCTOR IDENTIFICATION NUMBER IDENTIFIES A SHIELD LEAD, COLOR, OR MARKED LETTER. A - FROM END OF SHIELD B - TO END OF SHIELD G - GREEN K - BLACK L - BLUE N - BROWN R - RED W - WHITE Y - YELLOW
6	ASTERISK DENOTES LOWER CASE LETTER
7	GRID MODULE ON PICTURE SHEET IS 1 INCH TRUE POSITION
8	UNLESS OTHERWISE SPECIFIED FEATURE CENTERLINES ON PICTURE SHEET ARE LOCATED WITHIN + OR - .25. ENDS OF HOOKUP WIRES OR ACCESSORIES ARE LOCATED WITHIN .12.
9	VENDOR ITEM - SEE SOURCE CONTROL OR SPECIFICATION CONTROL DRAWING.
10	CRIMP CONTACTS PER ND1002032.

NOTE NUMBER	GENERAL NOTES DESCRIPTION
11	ALL UNUSED CONTACT CAVITIES SHALL BE FILLED WITH A CONTACT OR CONTACT AND SEALING PLUG AS FOLLOWS CONNECTOR 56J5 AND P25 USE ITEM NUMBERS 19 AND 24. CONNECTOR 56P27, USE ITEM NUMBER 20. CONNECTOR 56P30, AND 31 USE ITEM NUMBERS 18 AND 23.
12	LACE HARNESS PER ND1002032 USING ITEM NUMBER 40.
13	APPLY BONDING MATERIAL PER ND1002187, TYPE 1, USING ITEMS 38 AND 39 TO THE THREADED PORTION OF CONNECTOR AND TO THE THREADED PORTION OF ADAPTER PRIOR TO ASSY.
14	ALL SHIELDED TERMINATIONS SHALL BE LOCATED BELOW REFERENCE LINE A. THERE SHALL BE NO EXPOSED CONDUCTORS OR ACCESSORIES AT THE SURFACE OF THE POTTING COMPOUND.
15	BEFORE LACING HARNESS, APPLY 2 TURNS OF TAPE TO INDICATE CABLE CLAMP LOCATION.
16	WRAP TAPE AROUND HARNESS IN AREA SHOWN AS REQUIRED TO BUILD UP DIAMETER TO FIT SHELL HOLE.
17	MARK CONNECTOR WITH REFERENCE DESIGNATION AS SHOWN .12 HIGH, BLACK, PER ND1002019, CENTRALIZE
19	MARK CHARACTERS .12 HIGH, BLACK, PER ND1002019, SERIALIZE PER ND1002023.
20	CONTINUITY TEST PER CONDUCTOR CHART. RESISTANCE SHALL BE LESS THAN 1/2 OHM. TEST PER MIL-STD-202, METHOD 303.

NOTE NUMBER	GENERAL NOTES DESCRIPTION
21	INSULATION RESISTANCE SHALL BE GREATER THAN 100 MEGOHMS WITH 500 VDC APPLIED BETWEEN A. THE ASSEMBLY PINS AND STRUCTURE GROUND, WITH THE EXCEPTION OF THOSE PINS ELECTRICALLY CONNECTED TO STRUCTURE GROUND AND THOSE PINS SPECIFIED IN PAR. B. B. EACH PIN AND ALL OTHER PINS NOT ELECTRICALLY CONNECTED, INCLUDING ALL SPARE PINS. TEST PER MIL-STD-202, METHOD 302, EXCEPT ELECTRIFICATION TIME NOT APPLICABLE. SHORT CIRCUIT CURRENT LIMITED TO 15 MILLIAMPS.
22	DELETED
23	ENCAPSULATE BACK OF CONNECTORS PER ND1002236 USING ITEMS 34 AND 35.
24	CONDUCTORS LISTED WITH AN A OR B IN THE REMARKS COLUMN ARE TO BE GROUP SHIELDED PER DETAILS A, B AND C OF THE CONFIGURATION DRAWING.
25	GROUP SHIELDING - THREAD ONE CONTINUOUS LENGTH OF GROUND WIRE, ITEM 10, THROUGH CENTER OF EMI/RFI SHIELDING TAPE, ITEM 29. ALLOW 6 INCHES OF GROUND WIRE TO EXTEND BEYOND ENDS OF SHIELDING TAPE. WRAP CABLE WITH ONE CONTINUOUS LENGTH OF PREPARED SHIELDING. SUCCESSIVE TURNS SHALL OVERLAP BY APPROXIMATELY 1/2 THE WIDTH OF THE TAPE, WITH A MINIMUM OF RIDGES AND FOLDS.
26	COMPLETELY COVER SHIELD WITH ONE CONTINUOUS WRAP OF INSULATION TAPE, ITEM 32. SUCCESSIVE TURNS SHALL OVERLAP BY APPROXIMATELY 1/2 THE WIDTH OF THE TAPE, WITH A MINIMUM OF RIDGES AND FOLDS. WRAP TAPE IN OPPOSITE DIRECTION TO SHIELD WRAP.
27	ASSEMBLE INSULATION TUBING, ITEM 30, OVER GROUND WIRE AS REQUIRED TO REACH TERMINATION. ASSEMBLE SHRINK SLEEVING AS SHOWN.

NOTE NUMBER	GENERAL NOTES DESCRIPTION
28	DELETED
29	DELETED
30	ASSEMBLE A LENGTH OF WIRE BRAID, ITEM 57, OVER CONDUCTORS H135, H136, AND H137. ALLOW 1.50 INCHES OF LEAD TO EXTEND BEYOND BRAID. COVER BRAID WITH TEFLON TAPE, ITEM 32, PER NOTE 26. ALLOW .25 INCH OF BRAID TO EXTEND BEYOND TAPE. FOLD BRAID OVER TAPE AND TERMINATE PER ND1002071, FIG. 6B.
31	NUMBERS INDICATE SEQUENCE IN WHICH GROUP SHIELD A IS TO BE WRAPPED. CUT DRAIN WIRE BACK 1/2 INCH WITHIN SHIELD WRAP AT P30 AND P31 ENDS.
32	PERFORM WORKMANSHIP VIBRATION A. SINUSOIDAL SWEEP AT 3.5 G RMS. LIMITED TO 0.3 INCH PEAK TO PEAK DISPLACEMENT, FROM 10 TO 2000 CPS AT A RATE OF 4 OCTAVES PER MINUTE. B. VIBRATION ALONG THE X AXIS OF THE SPACE CRAFT. C. MONITOR FOR DISCONTINUITIES OF 10 MICRO SECONDS OR GREATER DURING VIBRATION. D. COMPLETE CONTINUITY AND INSULATION RESISTANCE TESTING MUST BE ACCOMPLISHED AFTER VIBRATION.
33	BOND NUT PLATE ASSEMBLIES TO CONNECTOR 56J5 PER ND1002004, USING ITEMS 61 AND 62.
34	TO CRIMP LEADS TO CONTACTS OF CONNECTORS P30 AND P31, USE SHORT LENGTHS OF 22AWG WIRE TO BUILD UP LEAD DIAMETER TO FIT CONTACT BARREL. TOTAL NUMBER OF FUNCTIONAL AND DUMMY LEADS MUST EQUAL SIX PER CONTACT. TWIST LEADS TOGETHER BEFORE CRIMPING TO CONTACT. AFTER CRIMPING, CUT DUMMY LEADS FLUSH WITH TOP OF CONTACT.
35	SOLDER PER ND1002071, USING ITEMS 63 OR 64 AND 65.

NOTE NUMBER	GENERAL NOTES DESCRIPTION
36	ASSEMBLE INSULATION SLEEVE, ITEM 66 OVER EACH ELECTRICALLY CONNECTED PIN OF CONNECTOR P27. POSITION SLEEVING FLUSH TO TOP OF NYLON INSULATOR.

LEAD TOLERANCE CHART

	LEAD LG	JKT STRIP LG	SHIELD STRIP LG	LEAD CUT LG	INS STRIP LG
UNDER 3 INCHES	+ .12-.00	+.06-.06	+.06-.06	+.06-.06	+.06-.00
3 INCH TO 3 FT	+ .50-.00	+.25-.25	+.25-.25	+.25-.25	
3 FT TO 10 FT	+1.00-.00				
10 FT AND OVER	+2.00-.00				

SEE NOTE — LIST OF MATERIALS

NUMBER	ITEM	QTY	PART NO.	DESCRIPTION
	1			DELETED
	2	1	2014648-002	WIRE PER 1010789-006, 22 AWG, YEL, 240 FT TOT LG
	3	1	2014648-003	WIRE PER 1010789-016, 26 AWG, YEL, 170 FT TOT LG
	4	1	2014648-004	WIRE PER 1010789-008, 22 AWG, YEL, RED, 10 FT TOT LG
	5	1	2014648-005	WIRE PER 1010789-017, 26 AWG, YEL, RED, 8 FT TOT LG
	6			DELETED
	7	1	2014648-007	WIRE PER 1010789-019, 26 AWG, YEL, RED, GRN, BRN, 5 FT TOT LG
	8	1	2014648-008	WIRE PER 1010789-015, 26 AWG, YEL, RED, YEL JKT, 20 FT TOT LG
	9	1	2014648-009	WIRE PER 1010789-024, 26 AWG, BLK, 5 FT TOT LG
	10	1	2014648-010	WIRE PER QQ-W-343, TYPE C, CLASS C, UNCOATED SILVER PLATED, 22AWG 30 FT TOT LG.
	11	1	2014648-011	WIRE PER 1010789-002, 24 AWG, BLK, 5 FT TOT LG
	12	1	2014746-011	CONNECTOR, PLUG, ELECTRICAL, (56P27)
9	13	1	1010929-003	CONNECTOR, PLUG, ELECTRICAL, (56P25)
9	14	1	1010921- 1	CONNECTOR, PLUG, ELECTRICAL, (56P30)

SEE NOTE — LIST OF MATERIALS

NUMBER	ITEM	QTY	PART NO.	DESCRIPTION
9	15	1	1010921- 2	CONNECTOR, PLUG, ELECTRICAL, (56P31)
9	16	1	1010930-003	CONNECTOR, RECEPTACLE, ELECTRICAL (56J5)
9	18	36	1010932- 2	CONTACT, PIN
9	19	X	1010770- 2	CONTACT, SOCKET, SUPPLIED WITH CONNECTORS 1010929, AND 1010930.
9	20	56	1010955- 1	CONTACT, MALE
9	21	8	1010955- 2	CONTACT, MALE
	22	2	2014670- 13	ADAPTER, CONNECTOR
9	23	7	1010983- 1	PLUG, PROTECTIVE SEALING
9	24	39	1010958- 1	PLUG, PROTECTIVE SEALING
	25			DELETED
9	29	AR	1010989	TAPE, SHIELDING, EMI/RFI
9	30	AR	1006776- 19	INSULATION SLEEVING
	32	AR	MIL-T-23594	TAPE, TEFLON, TYPE II, 1 INCH WIDE
	33	AR	MIL-T-23594	TAPE, TEFLON, TYPE II, 1/4 INCH WIDE
9	34	AR	1012503	COMPOUND, POTTING, POLYURETHANE
9	35	AR	1012504	PRIMER, METAL PARTS
	36		1006277	DELETED
	37		1008822	DELETED

SEE NOTE — LIST OF MATERIALS

NUMBER	ITEM	QTY	PART NO.	DESCRIPTION
9	38	AR	1010661	EPOXY RESIN
9	39	AR	1010679	ADHESIVE ACTIVATOR
9	40	AR	1012507-004	TAPE, LACING AND TYING
	42			DELETED
	43			DELETED
	44			DELETED
	45			DELETED
	46			DELETED
	47			DELETED
	48			DELETED
	49			DELETED
	50	4	2021203	TERMINAL LUG SOLDER
	51	4	MS35333-69	WASHER, LOCK
9	52	4	1006783- 93	SCREW, BUTTON HD
9	53	13	1010402- 2	SLEEVE, SOLDER
	54			DELETED
	55			DELETED
	56			DELETED

SEE NOTE

LIST OF MATERIALS

NUMBER	ITEM	QTY	PART NO.	DESCRIPTION
	57	1	2014648-012	WIRE BRAID, QQ-B-575, .12 DIA, 36 AWG, 10 FT TOTAL LENGTH
	58			DELETED
9	59	1	1012534- 36	SLEEVING, INSULATION, ELEC, (HEAT SHRINKABLE)
	60	1	2010725-011	NOT PLATE ASSEMBLY
9	61	AR	1010682	EPOXY RESIN
9	62	AR	1010683	CURING AGENT, AMINE
	63	AR	QQ-S-571	SOLDER SN 60 WRAP 2
	64	AR	QQ-S-571	SOLDER SN 60 WS
	65	AR	MIL-F-14256	FLUX, TYPE A
/	66	59	1010499-114	INSULATION SLEEVING (HEAT SHRINKABLE)

SIZE	CODE IDENT NO.	
A	80230	2014648
SCALE-NONE	REV LTR P	SHEET 10 OF 32

LEAD IDENT		WIRE MATL ITEM	LEAD LG	CIRCUIT PT FROM (A) TO (B)	TERM.JKT AREA NO.	STRIP LG	SHLD STRIP LG	LEAD CUT LG	INS STRIP LG	TIN	NOTE ONE, FIG	ACCESSORY ITEMS	REMARKS
H	1			DELETED									
H	2			DELETED									
H	3	2		P27-A6 P30-9					.18 .13	NO NO		20	
H	4	2		P27-A7 P30-9					.18 .13	NO NO		20	
H	5	2		P27-B6 P30-9					.18 .13	NO NO		20	
H	6	2		P27-B7 P30-9					.18 .13	NO NO		20 18	
H	7	2		P27-C6 P30-10					.18 .13	NO NO		20	
H	8	2		P27-C7 P30-10					.18 .13	NO NO		20	
H	9	2		P27-D6 P30-10					.18 .13	NO NO		20 18	
H	10			DELETED									
H	11			DELETED									
H	12	2		P27-A3 P31-9					.18 .13	NO NO		20	

SIZE	CODE IDENT NO.	
A	80230	2014648
SCALE-NONE	REV LTR K	SHEET 11 OF 32

LEAD IDENT		WIRE MATL ITEM	LEAD LG	CIRCUIT PT FROM (A) TO (B)	TERM.JKT AREA NO.	STRIP LG	SHLD STRIP LG	LEAD CUT LG	INS STRIP LG	TIN	NOTE ONE, FIG	ACCESSORY ITEMS	REMARKS
H	13	2		P27-A4 P31-9					.18 .13	NO NO		20	
H	14	2		P27-A5 P31-9					.18 .13	NO NO		20	
H	15	2		P27-B4 P31-9					.18 .13	NO NO		20 18	
H	16	2		P27-B5 P31-10					.18 .13	NO NO		20	
H	17	2		P27-C4 P31-10					.18 .13	NO NO		20	
H	18	2		P27-C5 P31-10					.18 .13	NO NO		20 18	
H	19			DELETED									
H	20	2		P27-F7 P30-8					.18 .13	NO NO		20	
H	21	2		P27-G7 P30-8					.18 .13	NO NO		20	
H	22	2		P27-H7 P30-8					.18 .13	NO NO		20 18	
H	23			DELETED									
H	24	2		P27-F8 P31-8					.18 .13	NO NO		20	

SIZE	CODE IDENT NO.	
A	80230	2014648
SCALE-NONE	REV LTR K	SHEET 12 OF 32

LEAD IDENT		WIRE MATL ITEM	LEAD LG	CIRCUIT PT FROM (A) TO (B)	TERM.JKT AREA NO.	STRIP LG	SHLD STRIP LG	LEAD CUT LG	INS STRIP LG	TIN	NOTE ONE, FIG	ACCESSORY ITEMS	REMARKS
H	25	2		P27-G8 P31-8					.18 .13	NO NO		20	
H	26	2		P27-H8 P31-8					.18 .13	NO NO		20 18	
H	27			DELETED									
H	28			DELETED									
H	29			DELETED									
H	30			DELETED									
H	31			DELETED									
H	32			DELETED									
H	33	2		P27-B8 P30-16					.18 .13	NO NO		20	
H	34	2		P27-B9 P31-16					.18 .13	NO NO		20	
H	35	2		P27-C8 P30-16					.18 .13	NO NO		20	
H	36	2		P27-C9 P31-16					.18 .13	NO NO		20	

SIZE	CODE IDENT NO.	
A	80230	2014648
SCALE-NONE	REV LTR K	SHEET 13 OF 32

LEAD IDENT	WIRE MATL ITEM	LEAD LG	CIRCUIT PT FROM (A) TO (B)	TERM.JKT AREA NO.	STRIP LG	SHLD STRIP LG	LEAD CUT LG	INS STRIP LG	TIN	NOTE ONE, FIG	ACCESSORY ITEMS	REMARKS
H 37	2		P27-D7 P31-15					.18 .13	NO NO		20	
H 38	2		P27-D8 P31-15					.18 .13	NO NO		20	
H 39	2		P27-D9 P30-15					.18 .13	NO NO		20	
H 40	2		P27-F9 P30-15					.18 .13	NO NO		20	
H 41	2		P27-G9 P30-3					.18 .13	NO NO		20	
H 42	2		P27-H9 P31-3					.18 .13	NO NO		20	
H 43			DELETED									
H 44			DELETED									
H 45			DELETED									
H 46			DELETED									
H 47			DELETED									
H 47G			DELETED									

SIZE	CODE IDENT NO.	
A	80230	2014648
SCALE-NONE	REV LTR K	SHEET 14 OF 32

LEAD IDENT	WIRE MATL ITEM	LEAD LG	CIRCUIT PT FROM (A) TO (B)	TERM.JKT AREA NO.	STRIP LG	SHLD STRIP LG	LEAD CUT LG	INS STRIP LG	TIN	NOTE ONE, FIG	ACCESSORY ITEMS	REMARKS
H 47R			DELETED									
H 47Y			DELETED									
H 48			DELETED									
H 48G			DELETED									
H 48R			DELETED									
H 48Y			DELETED									
H 49			DELETED									
H 49G			DELETED									
H 49R			DELETED									
H 49Y			DELETED									
H 50			DELETED									
H 50G			DELETED									

SIZE	CODE IDENT NO.	
A	80230	2014648
SCALE-NONE	REV LTR K	SHEET 15 OF 32

LEAD IDENT	WIRE MATL ITEM	LEAD LG	CIRCUIT PT FROM (A) TO (B)	TERM.JKT AREA NO.	STRIP LG	SHLD STRIP LG	LEAD CUT LG	INS STRIP LG	TIN	NOTE ONE, FIG	ACCESSORY ITEMS	REMARKS
H 50R			DELETED									
H 50Y			DELETED									
H 51			DELETED									
H 52			DELETED									
H 53			DELETED									
H 54			DELETED									
H 55			DELETED									
H 55G			DELETED									
H 55R			DELETED									
H 55Y			DELETED									
H 56			DELETED									
H 56G			DELETED									

SIZE	CODE IDENT NO.	
A	80230	2014648
SCALE-NONE	REV LTR K	SHEET 16 OF 32

LEAD IDENT	WIRE MATL ITEM	LEAD LG	CIRCUIT PT FROM (A) TO (B)	TERM.JKT AREA NO.	STRIP LG	SHLD STRIP LG	LEAD CUT LG	INS STRIP LG	TIN	NOTE ONE, FIG	ACCESSORY ITEMS	REMARKS
H 56R			DELETED									
H 56Y			DELETED									
H 57			DELETED									
H 57G			DELETED									
H 57R			DELETED									
H 57Y			DELETED									
H 58			DELETED									
H 58G			DELETED									
H 58R			DELETED									
H 58Y			DELETED									
H 59			DELETED									
H 59G			DELETED									

SIZE	CODE IDENT NO.	
A	80230	2014648
SCALE-NONE	REV LTR K	SHEET 17 OF 32

LEAD IDENT	WIRE MATL ITEM	LEAD LG	CIRCUIT PT FROM (A) TO (B)	TERM. AREA NO.	JKT STRIP LG	SHLD STRIP LG	LEAD CUT LG	INS STRIP LG	TIN	NOTE ONE, FIG	ACCESSORY ITEMS	REMARKS
H 59R			DELETED									
H 59Y			DELETED									
H 61			DELETED									
H 62			DELETED									
H 63R			DELETED									
H 63Y			DELETED									
H 67	5											
H 67R			P25-83					.13	NO		19	
			P27-K5					.18	NO		21	
H 67Y			P25-84					.13	NO		19	
			P27-K4					.18	NO		21	
H 68	7											
H 68G			P25-55					.13	NO		19	
			P27-H4					.22	NO			
H 68N			P25-53					.13	NO		19	
			P27-H4					.22	NO		20	

SIZE	CODE IDENT NO.	
A	80230	2014648

SCALE-NONE | REV LTR K | SHEET 18 OF 32

LEAD IDENT	WIRE MATL ITEM	LEAD LG	CIRCUIT PT FROM (A) TO (B)	TERM. AREA NO.	JKT STRIP LG	SHLD STRIP LG	LEAD CUT LG	INS STRIP LG	TIN	NOTE ONE, FIG	ACCESSORY ITEMS	REMARKS
H 68R			P25-31					.13	NO		19	
			P27-H5					.18	NO		21	
H 68Y			P25-54					.13	NO		19	
			P27-G5					.18	NO		21	
H 69	7		P25-57					.13	NO		19	
			P27-G4					.18	NO		20	
H 70	3		J5-62					.13	NO		19	B
			P25-51					.13	NO		19	
H 71	3		J5-63					.13	NO		19	B
			P25-78					.13	NO		19	
H 72	3		J5-38					.13	NO		19	B
			P25-77					.13	NO		19	
H 73	3		J5-40					.13	NO		19	B
			P25-76					.13	NO		19	
H 74	3		J5-39					.13	NO		19	B
			P25-79					.13	NO		19	
H 75	3		J5-64					.13	NO		19	B
			P25-49					.13	NO		19	
H 76	2		J5-66					.13	NO		19	B
			P25-30					.13	NO		19	
H 77	3		J5-65					.13	NO		19	B
			P25-75					.13	NO		19	
H 78	2		J5-41					.13	NO		19	B
			P25-28					.13	NO		19	

SIZE	CODE IDENT NO.	
A	80230	2014648

SCALE-NONE | REV LTR K | SHEET 19 OF 32

LEAD IDENT	WIRE MATL ITEM	LEAD LG	CIRCUIT PT FROM (A) TO (B)	TERM. AREA NO.	JKT STRIP LG	SHLD STRIP LG	LEAD CUT LG	INS STRIP LG	TIN	NOTE ONE, FIG	ACCESSORY ITEMS	REMARKS
H 79	2		J5-42					.13	NO		19	B
			P25-48					.13	NO		19	
H 80	3		J5-52					.13	NO		19	B
			P25-2					.13	NO		19	
H 81	3		J5-76					.13	NO		19	B
			P25-9					.13	NO		19	
H 82	3		J5-30					.13	NO		19	B
			P25-22					.13	NO		19	
H 83	3		J5-29					.13	NO		19	B
			P25-41					.13	NO		19	
H 84	3		J5-14					.13	NO		19	B
			P25-66					.13	NO		19	
H 85	3		J5-50					.13	NO		19	B
			P25-3					.13	NO		19	
H 86	3		J5-74					.13	NO		19	B
			P25-10					.13	NO		19	
H 87	3		J5-75					.13	NO		19	B
			P25-23					.13	NO		19	
H 88	3		J5-51					.13	NO		19	B
			P25-42					.13	NO		19	
H 89	3		J5-77					.13	NO		19	B
			P25-67					.13	NO		19	
H 90	3		J5-27					.13	NO		19	B
			P25-12					.13	NO		19	

SIZE	CODE IDENT NO.	
A	80230	2014648

SCALE-NONE | REV LTR K | SHEET 20 OF 32

LEAD IDENT	WIRE MATL ITEM	LEAD LG	CIRCUIT PT FROM (A) TO (B)	TERM. AREA NO.	JKT STRIP LG	SHLD STRIP LG	LEAD CUT LG	INS STRIP LG	TIN	NOTE ONE, FIG	ACCESSORY ITEMS	REMARKS
H 91	3		J5-13					.13	NO		19	B
			P25-11					.13	NO		19	
H 92	3		J5-28					.13	NO		19	B
			P25-24					.13	NO		19	
H 93	3		J5-73					.13	NO		19	B
			P25-43					.13	NO		19	
H 94	3		J5-49					.13	NO		19	B
			P25-68					.13	NO		19	
H 95	2		J5-45					.13	NO		19	B
			P25-7					.13	NO		19	
H 96	3		J5-72					.13	NO		19	B
			P25-27					.13	NO		19	
H 97	3		J5-48					.13	NO		19	B
			P25-45					.13	NO		19	
H 98	3		J5-47					.13	NO		19	B
			P25-26					.13	NO		19	
H 99	3		J5-71					.13	NO		19	B
			P25-25					.13	NO		19	
H 100	3		J5-4					.13	NO		19	B
			P25-47					.13	NO		19	
H 101	3		J5-22					.13	NO		19	B
			P25-70					.13	NO		19	
H 102	3		J5-46					.13	NO		19	B
			P25-46					.13	NO		19	

SIZE	CODE IDENT NO.	
A	80230	2014648

SCALE-NONE | REV LTR K | SHEET 21 OF 32

LEAD IDENT	WIRE MATL ITEM	LEAD LG	CIRCUIT PT FROM (A) TO (B)	TERM. AREA NO.	JKT STRIP LG	SHLD STRIP LG	LEAD CUT LG	INS STRIP LG	TIN	NOTE ONE, FIG	ACCESSORY ITEMS	REMARKS
H 103	2		J5-70					.13	NO		19	D
			P25-73					.13	NO		19	
H 104	3		J5-25					.13	NO		19	B
			P25-13					.13	NO		19	
H 105	3		J5-26					.13	NO		19	B
			P25-72					.13	NO		19	
H 106	3		J5-11					.13	NO		19	B
			P25-74					.13	NO		19	
H 107	3		J5-23					.13	NO		19	B
			P25-44					.13	NO		19	
H 108	3		J5-12					.13	NO		19	B
			P25-71					.13	NO		19	
H 109	3		J5-10					.13	NO		19	B
			P25-69					.13	NO		19	
H 110	3		J5-24					.13	NO		19	B
			P25-18					.13	NO		19	
H 111	2		J5-44					.13	NO		19	B
			P25-21					.13	NO		19	
H 112	2		J5-68					.13	NO		19	B
			P25-8					.13	NO		19	
H 113	2		J5-43					.13	NO		19	B
			P25-1					.13	NO		19	
H 120	2		P27-G3					.18	NO		20	
			P30-6					.13	NO		18	

SIZE	CODE IDENT NO.	
A	80230	2014648
SCALE-NONE	REV LTR K	SHEET 22 OF 32

LEAD IDENT	WIRE MATL ITEM	LEAD LG	CIRCUIT PT FROM (A) TO (B)	TERM. AREA NO.	JKT STRIP LG	SHLD STRIP LG	LEAD CUT LG	INS STRIP LG	TIN	NOTE ONE, FIG	ACCESSORY ITEMS	REMARKS
H 121	2		P27-G2					.18	NO		20	
			P31-6					.13	NO		18	
H 122			DELETED									
H 123			DELETED									
H 128			DELETED									
H 128G			DELETED									
H 128R			DELETED									
H 128Y			DELETED									
H 129	5											
H 129R			P25-14					.13	NO		19	
			P27-F6					.18	NO		21	
H 129Y			P25-32					.13	NO		19	
			P27-G6					.18	NO		21	
H 130			DELETED									
H 130R			DELETED									

SIZE	CODE IDENT NO.	
A	80230	2014648
SCALE-NONE	REV LTR L	SHEET 23 OF 32

LEAD IDENT	WIRE MATL ITEM	LEAD LG	CIRCUIT PT FROM (A) TO (B)	TERM. AREA NO.	JKT STRIP LG	SHLD STRIP LG	LEAD CUT LG	INS STRIP LG	TIN	NOTE ONE, FIG	ACCESSORY ITEMS	REMARKS
H 130Y			DELETED									
H 131	8				1.00	.75				6B	53	
					1.75	1.50				6B	59	
H 131A	11		SHLD H131					.20	NO			
			P27-H2					.18	NO		20	
H 131B			DELETED									
H 131R			P27-K3					.18	NO		21	
			P30-17					.13	NO		18	
H 131Y			P27-H3					.18	NO		21	
			P30-18					.13	NO		18	
H 132	8				1.00	.75				6A	53	
					1.75	1.50				6B	53	
H 132A	11		SHLD H132					.20	NO			
			E16					.19	NO			
H 132B	9		P27-H6					.22	NO			
			SHLD H132					.20	NO			
H 132R			J5-19					.13	NO		19	
			P27-K6					.22	NO			
H 132Y			J5-18					.13	NO		19	
			P27-K7					.22	NO			
H 133	8				1.00	.75				6A	53	
					1.75	1.50				6B	53	

SIZE	CODE IDENT NO.	
A	80230	2014648
SCALE-NONE	REV LTR K	SHEET 24 OF 32

LEAD IDENT	WIRE MATL ITEM	LEAD LG	CIRCUIT PT FROM (A) TO (B)	TERM. AREA NO.	JKT STRIP LG	SHLD STRIP LG	LEAD CUT LG	INS STRIP LG	TIN	NOTE ONE, FIG	ACCESSORY ITEMS	REMARKS
H 133A	11		SHLD H133					.20	NO			
			E17					.19	NO			
H 133B	9		P27-H6					.22	NO		20	
			SHLD H133					.20	NO			
H 133R			P25-38					.13	NO		19	
			P27-K6					.22	NO		20	
H 133Y			P25-40					.13	NO		19	
			P27-K7					.22	NO		20	
H 134	8				1.00	.75				6A	53	
					1.75	1.50				6A	53	
H 134A	11		SHLD H134					.20	NO			
			E16					.19	NO			
H 134B	11		E17					.19	NO			
			SHLD H134					.20	NO			
H 134R			J5-7					.13	NO		19	
			P25-5					.13	NO		19	
H 134Y			J5-8					.13	NO		19	
			P25-4					.13	NO		19	
H 135	4									6A	53	SEE NOTE 30
										6B	53	
H 135A	11		SHLD H135					.20	NO			
			E17					.19	NO		50	
H 135B	11		P31-11					.13	NO			
			SHLD H135					.20	NO			

SIZE	CODE IDENT NO.	
A	80230	2014648
SCALE-NONE	REV LTR K	SHEET 25 OF 32

LEAD IDENT	WIRE MATL ITEM	LEAD LG	CIRCUIT PT FROM (A) TO (B)	TERM. AREA NO.	JKT STRIP LG	SHLD STRIP LG	LEAD CUT LG	INS STRIP LG	TIN	NOTE ONE, FIG	ACCESSORY ITEMS	REMARKS
H 135R			P25-62					.13	NO		19	
			P31-17					.13	NO			
H 135Y			P25-63					.13	NO		19	
			P31-18					.13	NO			
H 136	4									6A	53	SEE NOTE 30
										6B	53	
H 136A	11		SHLD H136					.20	NO			
			E18					.19	NO			
H 136B	11		P31-11					.13	NO			
			SHLD H136					.20	NO			
H 136R			P25-64					.13	NO		19	
			P31-17					.13	NO			
H 136Y			P25-65					.13	NO		19	
			P31-18					.13	NO			
H 137	4									6A	53	SEE NOTE 30
										6B	53	
H 137A	11		SHLD H137					.20	NO			
			E16					.19	NO		50	
H 137B	11		P31-11					.13	NO		18	
			SHLD H137					.20	NO			
H 137R			J5-9					.13	NO		19	
			P31-17					.13	NO		18	
H 137Y			J5-2					.13	NO		19	
			P31-18					.13	NO		18	

LEAD IDENT	WIRE MATL ITEM	LEAD LG	CIRCUIT PT FROM (A) TO (B)	TERM. AREA NO.	JKT STRIP LG	SHLD STRIP LG	LEAD CUT LG	INS STRIP LG	TIN	NOTE ONE, FIG	ACCESSORY ITEMS	REMARKS
H 138	10		E15					.19	NO			A
			NONE									
H 139	10		E15					.19	NO		50	B
			E18					.19	NO		50	
H 141			DELETED									
H 142			DELETED									
H 143			DELETED									
H 144			DELETED									
H 145			DELETED									
H 146			DELETED									
H 147			DELETED									
H 148			DELETED									
H 149			DELETED									
H 150			DELETED									

LEAD IDENT	WIRE MATL ITEM	LEAD LG	CIRCUIT PT FROM (A) TO (B)	TERM. AREA NO.	JKT STRIP LG	SHLD STRIP LG	LEAD CUT LG	INS STRIP LG	TIN	NOTE ONE, FIG	ACCESSORY ITEMS	REMARKS
H 151			DELETED									
H 152			DELETED									
H 153			DELETED									
H 154			DELETED									
H 157	2		P30-4					.13	NO			
			P31-4					.13	NO			
H 158	2		P30-14					.13	NO			
			P31-14					.13	NO			
H 159	2		P30-14					.13	NO			
			P31-14					.13	NO			
H 160	2		P30-15					.13	NO			
			P31-15					.13	NO			
H 161	2		P30-15					.13	NO			
			P31-15					.13	NO			
H 162	2		P30-16					.13	NO			
			P31-16					.13	NO			
H 163	2		P30-16					.13	NO		18	
			P31-16					.13	NO		18	
H 164	2		P30-3					.13	NO		18	
			P30-15					.13	NO		18	

LEAD IDENT	WIRE MATL ITEM	LEAD LG	CIRCUIT PT FROM (A) TO (B)	TERM. AREA NO.	JKT STRIP LG	SHLD STRIP LG	LEAD CUT LG	INS STRIP LG	TIN	NOTE ONE, FIG	ACCESSORY ITEMS	REMARKS
H 165	2		P31-3					.13	NO		18	
			P31-15					.13	NO		18	
H 166	2		P30-1					.13	NO			A
			P31-1					.13	NO			
H 167	2		P30-1					.13	NO			A
			P31-1					.13	NO			
H 168	2		P27-B3					.18	NO		20	
			P30-7					.13	NO			
H 169	2		P27-B2					.18	NO		20	
			P31-7					.13	NO			
H 170	2		P27-B1					.18	NO		20	
			P30-14					.13	NO			
H 171	2		P27-C3					.18	NO		20	
			P30-7					.13	NO			
H 172	2		P27-C2					.18	NO		20	
			P31-7					.13	NO			
H 173	2		P27-C1					.18	NO		20	
			P30-14					.13	NO		18	
H 174	2		P27-D3					.18	NO		20	
			P30-7					.13	NO			
H 175	2		P27-D2					.18	NO		20	
			P31-7					.13	NO			
H 176	2		P27-D1					.18	NO		20	
			P31-14					.13	NO			

LEAD IDENT	WIRE MATL ITEM	LEAD LG	CIRCUIT PT FROM (A) TO (B)	TERM.JKT AREA NO.	STRIP LG	SHLD STRIP LG	LEAD CUT LG	INS STRIP LG	TIN	NOTE ONE, FIG	ACCESSORY ITEMS	REMARKS
H 177	2		P27-F3					.18	NO		20	
			P30-7					.13	NO		18	
H 178	2		P27-F2					.18	NO		20	
			P31-7					.13	NO		18	
H 179	2		P27-F1					.18	NO		20	
			P31-14					.13	NO		18	
H 180	2		J5-53					.13	NO		19	A
			P30-2					.13	NO			
H 181	2		J5-78					.13	NO		19	A
			P31-2					.13	NO			
H 182	2		J5-54					.13	NO		19	A
			P30-1					.13	NO			
H 183	2		J5-79					.13	NO		19	A
			P30-2					.13	NO			
H 184	2		J5-80					.13	NO		19	A
			P31-2					.13	NO			
H 185	2		J5-55					.13	NO		19	A
			P30-1					.13	NO			
H 186	2		J5-33					.13	NO		19	A
			P30-2					.13	NO			
H 187	2		J5-32					.13	NO		19	A
			P31-2					.13	NO			
H 188	2		J5-16					.13	NO		19	A
			P30-1					.13	NO		18	

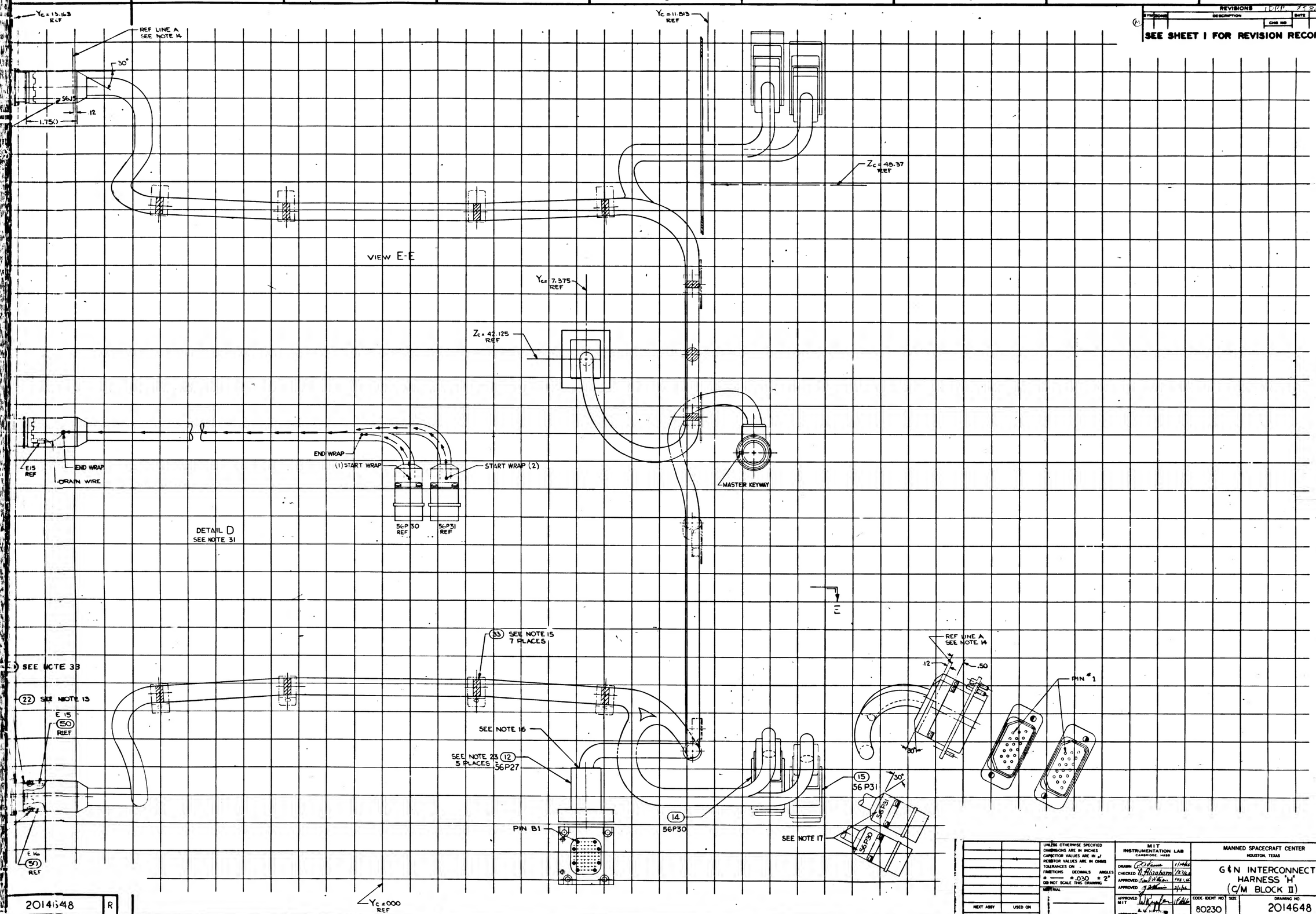
SIZE	CODE IDENT NO.	
A	80230	2014648

SCALE-NONE | REV LTR K | SHEET 30 OF 32

LEAD IDENT	WIRE MATL ITEM	LEAD LG	CIRCUIT PT FROM (A) TO (B)	TERM.JKT AREA NO.	STRIP LG	SHLD STRIP LG	LEAD CUT LG	INS STRIP LG	TIN	NOTE ONE, FIG	ACCESSORY ITEMS	REMARKS
H 189	2		J5-81					.13	NO		19	A
			P30-2					.13	NO			
H 190	2		J5-57					.13	NO		19	A
			P31-2					.13	NO			
H 191	2		J5-56					.13	NO		19	A
			P31-1					.13	NO			
H 192	2		J5-58					.13	NO		19	A
			P30-2					.13	NO			
H 193	2		J5-34					.13	NO		19	A
			P31-2					.13	NO			
H 194	2		J5-35					.13	NO		19	A
			P31-1					.13	NO			
H 196	2		J5-60					.13	NO		19	
			P30-4					.13	NO		18	
H 197	2		J5-84					.13	NO		19	
			P31-4					.13	NO		18	
H 198	2		J5-31					.13	NO		19	A
			P30-2					.13	NO		18	
H 199	2		J5-15					.13	NO		19	A
			P31-2					.13	NO		18	
H 200	2		J5-5					.13	NO		19	A
			P31-1					.13	NO		18	
H 201	3		P25-15					.13	NO		19	
			P27-F5					.22	NO		20	

SIZE	CODE IDENT NO.	
A	80230	2014648

SCALE-NONE | REV LTR L | SHEET 31 OF 32



REVISIONS

SYM	ZONE	DESCRIPTION	CHG NO	DATE	APPD

SEE SHEET 1 FOR REVISION RECORD

NEXT ASSY	USED ON
APPLICATION	

UNLESS OTHERWISE SPECIFIED DIMENSIONS ARE IN INCHES
CAPACITOR VALUES ARE IN μf
RESISTOR VALUES ARE IN OHMS
TOLERANCES ON
FRACTIONS DECIMALS ANGLES
± ± .030 ± 2°
DO NOT SCALE THIS DRAWING
MATERIAL

MIT INSTRUMENTATION LAB CAMBRIDGE MASS

DRAWN	P. Adams	11-14-66
CHECKED	W. Abraham	12-7-66
APPROVED	Tom Wilson	FEB 1.68
APPROVED	J. Feldman	2-1-68
APPROVED MIT	W. Kaplan	1 Feb 68
APPROVED MSC	A. W. Smith	

MANNED SPACECRAFT CENTER HOUSTON, TEXAS

G&N INTERCONNECT HARNESS 'H' (C/M BLOCK II)

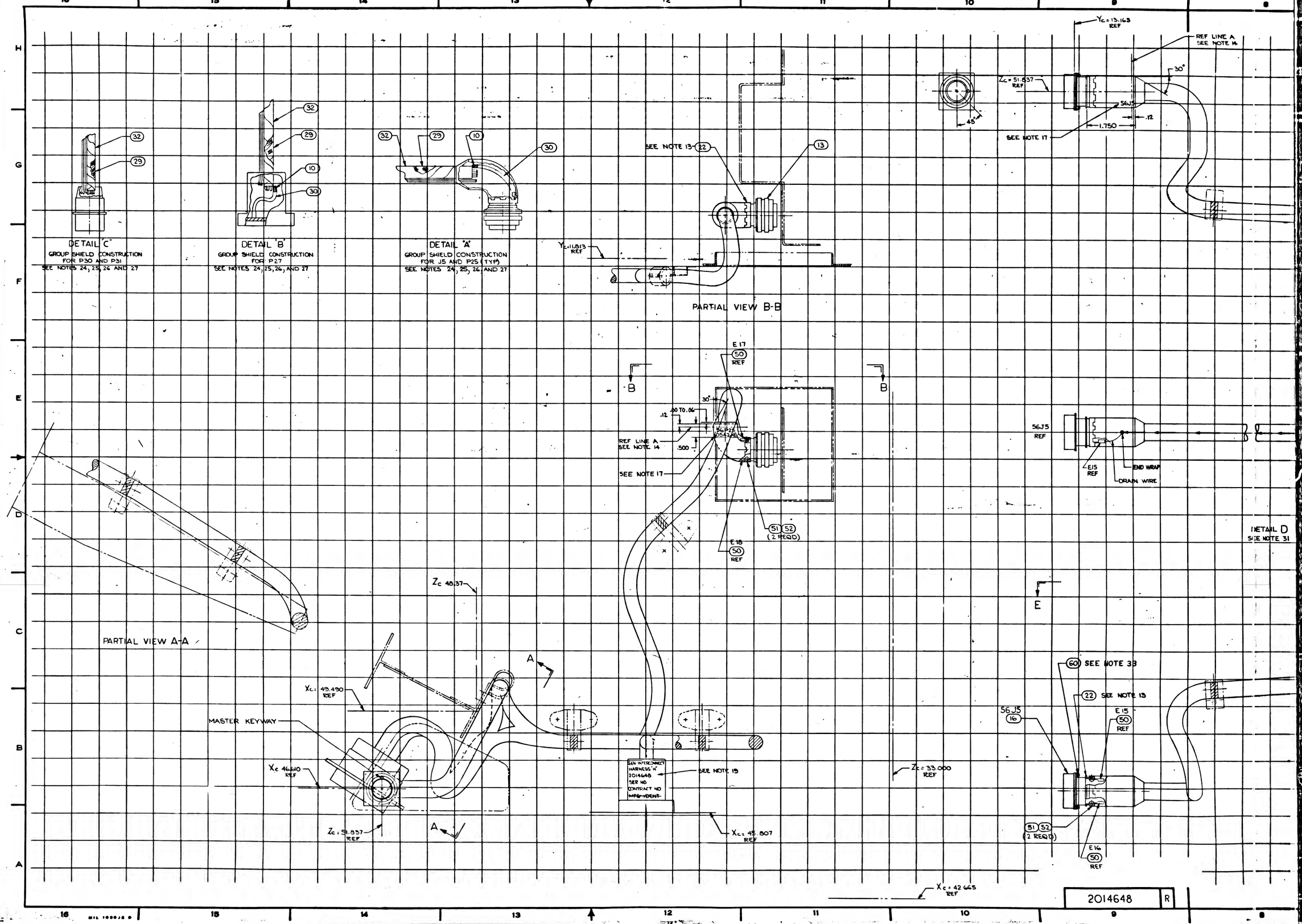
CODE IDENT NO 80230 | SIZE | DRAWING NO. 2014648

SCALE FULL | DATE | SHEET 32 OF 32

2014648 R

2014648

2/2014648


DETAIL "C"
GROUP SHIELD CONSTRUCTION FOR P30 AND P31
SEE NOTES 24, 25, 26 AND 27
DETAIL "B"
GROUP SHIELD CONSTRUCTION FOR P27
SEE NOTES 24, 25, 26, AND 27
DETAIL "A"
GROUP SHIELD CONSTRUCTION FOR J5 AND P25 (TYP)
SEE NOTES 24, 25, 26, AND 27
PARTIAL VIEW B-B
PARTIAL VIEW A-A
DETAIL D
SEE NOTE 31
SEE NOTE 13
SEE NOTE 17
REF LINE A SEE NOTE 14
SEE NOTE 19
SEE NOTE 33
MASTER KEYWAY
END WRAP
DRAIN WIRE
GEN INTERCONNECT HARNESS "A" 2014648 SER NO CONTRACT NO MFG IDENT
2014648
R

1/2014648